

Detection Rates, Pre-Test Carrier Risks, and Post-Test Residual Risks (Sorted by Gene)

The detection rates and risks set forth below were derived using publicly available information, including gnomAD (<https://gnomad.broadinstitute.org>) and ClinVar (<https://www.ncbi.nlm.nih.gov/clinvar>), and the rates were extrapolated using appropriate scientific methodologies. Published studies were used to derive individual carrier risks for CYP21A2, HBA1/HBA2 and SMN1. As additional clinical evidence is available, the data in these charts may be updated from time to time. These data are provided for general informational purposes only and are not intended as a substitute for professional medical judgment or medical advice.

For unknown or mixed ethnicity, consider using the ethnic background with the most conservative risk estimates.

N/A= Not Available

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
KCNJ1	Bartter syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	1 in 426	1 in 43,000	1 in 170,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	1 in 205	1 in 20,000	1 in 80,000
		Other (population not assigned)	99	1 in 178	1 in 18,000	1 in 72,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
KCTD7	Neuronal ceroid-lipofuscinosis	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
KIF14	Joubert syndrome and related disorders, including Meckel-Gruber syndrome	African American/Black	98	1 in 420	1 in 21,000	1 in 84,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	97	1 in 371	1 in 12,000	1 in 48,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
L1CAM	L1 syndrome	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
LAMA2	Muscular dystrophy, LAMA2-related	African American/Black	99	1 in 249	1 in 25,000	1 in 100,000
		Latino/Admixed American	97	1 in 133	1 in 4,400	1 in 18,000
		Ashkenazi Jewish	99	1 in 296	1 in 30,000	1 in 120,000
		East Asian	99	1 in 345	1 in 34,000	1 in 140,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	1 in 206	1 in 10,000	1 in 40,000
		South Asian	98	1 in 325	1 in 16,000	1 in 64,000
		Other (population not assigned)	99	1 in 414	1 in 41,000	1 in 160,000
		US general population	98	1 in 197	1 in 9,800	1 in 39,000
LAMA3	Junctional epidermolysis bullosa	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
LAMB3	Junctional epidermolysis bullosa	African American/Black	98	1 in 311	1 in 16,000	1 in 64,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	1 in 243	1 in 24,000	1 in 96,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 312	1 in 31,000	1 in 120,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
LAMC2	Junctional epidermolysis bullosa	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
LAMP2	Danon disease	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
LARS1	Acute infantile liver failure	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	1 in 481	1 in 48,000	1 in 190,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 472	1 in 47,000	1 in 190,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
LCA5	Leber congenital amaurosis	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	1 in 219	1 in 22,000	1 in 88,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
LCK	Severe combined immunodeficiency (SCID)	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
LHX3	Combined pituitary hormone deficiency	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
LIFR	Stüve-Wiedemann syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
LIG4	Severe combined immunodeficiency (SCID)	African American/Black	97	1 in 253	1 in 8,400	1 in 34,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
LIPA	Lysosomal acid lipase deficiency	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	1 in 327	1 in 33,000	1 in 130,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 232	1 in 23,000	1 in 92,000
		South Asian	99	1 in 450	1 in 45,000	1 in 180,000
		Other (population not assigned)	99	1 in 343	1 in 34,000	1 in 140,000
		US general population	99	1 in 285	1 in 28,000	1 in 110,000
LIPN	Autosomal recessive congenital ichthyosis (ARCI)	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
LMBRD1	Methylmalonic acidemia with homocystinuria	African American/Black	99	1 in 363	1 in 36,000	1 in 140,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	97	1 in 416	1 in 14,000	1 in 56,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	98	1 in 491	1 in 25,000	1 in 100,000
LOXHD1	Deafness and hearing loss, nonsyndromic	African American/Black	98	1 in 314	1 in 16,000	1 in 64,000
		Latino/Admixed American	99	1 in 328	1 in 33,000	1 in 130,000
		Ashkenazi Jewish	99	1 in 130	1 in 13,000	1 in 52,000
		East Asian	99	1 in 339	1 in 34,000	1 in 140,000
		Finnish	99	1 in 301	1 in 30,000	1 in 120,000
		Non-Finnish European/White	99	1 in 152	1 in 15,000	1 in 60,000
		South Asian	99	1 in 334	1 in 33,000	1 in 130,000
		Other (population not assigned)	99	1 in 414	1 in 41,000	1 in 160,000
		US general population	99	1 in 191	1 in 19,000	1 in 76,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
LPL	Lipoprotein lipase deficiency, familial	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 128	1 in 13,000	1 in 52,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		LRAT	Leber congenital amaurosis	African American/Black	99	< 1 in 500
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Non-Finnish European/White	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
South Asian	97			< 1 in 500	< 1 in 17,000	< 1 in 68,000
Other (population not assigned)	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
LRP2	Donnai-Barrow syndrome	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
LRPPRC	Leigh syndrome	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	1 in 326	1 in 16,000	1 in 64,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
LTBP4	Cutis laxa	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		LYST	Chediak-Higashi syndrome	African American/Black	99	1 in 397
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
Non-Finnish European/White	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
South Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)	97			< 1 in 500	< 1 in 17,000	< 1 in 68,000
US general population	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
MAK	Retinitis pigmentosa			African American/Black	98	1 in 315
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
MALT1	Severe combined immunodeficiency (SCID)	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
MAN2B1	Alpha-mannosidosis	African American/Black	99	1 in 287	1 in 29,000	1 in 120,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	1 in 206	1 in 21,000	1 in 84,000
		Non-Finnish European/White	99	1 in 426	1 in 43,000	1 in 170,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 494	1 in 49,000	1 in 200,000
MANBA	Beta-mannosidosis	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
MCCC1	3-Methylcrotonyl-CoA carboxylase deficiency	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 390	1 in 39,000	1 in 160,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 444	1 in 44,000	1 in 180,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 472	1 in 47,000	1 in 190,000
MCCC2	3-Methylcrotonyl-CoA carboxylase deficiency	African American/Black	99	1 in 377	1 in 38,000	1 in 150,000
		Latino/Admixed American	99	1 in 123	1 in 12,000	1 in 48,000
		Ashkenazi Jewish	99	1 in 192	1 in 19,000	1 in 76,000
		East Asian	99	1 in 310	1 in 31,000	1 in 120,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 249	1 in 25,000	1 in 100,000
		South Asian	99	1 in 464	1 in 46,000	1 in 180,000
		Other (population not assigned)	99	1 in 168	1 in 17,000	1 in 68,000
		US general population	99	1 in 217	1 in 22,000	1 in 88,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
MCEE	Methylmalonic acidemia	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		MCOLN1	Mucopolipidosis type IV	African American/Black	99	< 1 in 500
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	99			1 in 118	1 in 12,000	1 in 48,000
East Asian	97			< 1 in 500	< 1 in 17,000	< 1 in 68,000
Finnish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Non-Finnish European/White	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
South Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
MCPH1	Primary microcephaly			African American/Black	98	1 in 488
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 241	1 in 24,000	1 in 96,000
		Finnish	97	1 in 202	1 in 6,700	1 in 27,000
		Non-Finnish European/White	99	1 in 416	1 in 42,000	1 in 170,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	1 in 401	1 in 20,000	1 in 80,000
		US general population	99	1 in 445	1 in 44,000	1 in 180,000
MED17	Microcephaly, postnatal progressive, with seizures and brain atrophy	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
MEFV	Familial Mediterranean fever	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	1 in 116	1 in 12,000	1 in 48,000
		Ashkenazi Jewish	99	1 in 10	1 in 900	1 in 3,600
		East Asian	99	1 in 192	1 in 19,000	1 in 76,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 127	1 in 13,000	1 in 52,000
		South Asian	99	1 in 379	1 in 38,000	1 in 150,000
		Other (population not assigned)	99	1 in 56	1 in 5,500	1 in 22,000
		US general population	99	1 in 137	1 in 14,000	1 in 56,000
MEGF8	Carpenter syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
MESP2	Spondylothoracic dysostosis	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	1 in 124	1 in 4,100	1 in 16,000
		Non-Finnish European/White	97	1 in 233	1 in 7,700	1 in 31,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	97	1 in 48	1 in 1,600	1 in 6,400
		US general population	97	1 in 293	1 in 9,700	1 in 39,000
MFSD8	Neuronal ceroid-lipofuscinosis	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
MID1	Opitz G/BBB syndrome	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	98	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
MKKS	Bardet-Biedl syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
MKS1	Ciliopathies	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	1 in 285	1 in 14,000	1 in 56,000
		Finnish	97	1 in 72	1 in 2,400	1 in 9,600
		Non-Finnish European/White	98	1 in 266	1 in 13,000	1 in 52,000
		South Asian	98	1 in 459	1 in 23,000	1 in 92,000
		Other (population not assigned)	97	1 in 232	1 in 7,700	1 in 31,000
		US general population	98	1 in 342	1 in 17,000	1 in 68,000
MLC1	Megalencephalic leukoencephalopathy with subcortical cysts type 1	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 192	1 in 19,000	1 in 76,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
MMAA	Methylmalonic acidemia	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		MMAB	Methylmalonic acidemia	African American/Black	99	< 1 in 500
Latino/Admixed American	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
Ashkenazi Jewish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Non-Finnish European/White	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
South Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)	98			1 in 442	1 in 22,000	1 in 88,000
US general population	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
MMACHC	Methylmalonic acidemia with homocystinuria	African American/Black	98	1 in 274	1 in 14,000	1 in 56,000
		Latino/Admixed American	98	1 in 83	1 in 4,100	1 in 16,000
		Ashkenazi Jewish	97	1 in 179	1 in 5,900	1 in 24,000
		East Asian	99	1 in 255	1 in 25,000	1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	1 in 167	1 in 8,300	1 in 33,000
		South Asian	99	1 in 239	1 in 24,000	1 in 96,000
		Other (population not assigned)	98	1 in 162	1 in 8,100	1 in 32,000
MMADHC	Methylmalonic acidemia with homocystinuria	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
MMUT	Methylmalonic acidemia	African American/Black	99	1 in 170	1 in 17,000	1 in 68,000
		Latino/Admixed American	99	1 in 185	1 in 18,000	1 in 72,000
		Ashkenazi Jewish	99	1 in 316	1 in 32,000	1 in 130,000
		East Asian	99	1 in 116	1 in 12,000	1 in 48,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 329	1 in 33,000	1 in 130,000
		South Asian	99	1 in 239	1 in 24,000	1 in 96,000
		Other (population not assigned)	99	1 in 365	1 in 36,000	1 in 140,000
		US general population	99	1 in 248	1 in 25,000	1 in 100,000
MOCS1	Molybdenum cofactor deficiency	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
MOCS2	Molybdenum cofactor deficiency	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	1 in 451	1 in 15,000	1 in 60,000
		US general population	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
MPI	Congenital disorders of glycosylation	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	1 in 323	1 in 32,000	1 in 130,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
MPL	Congenital amegakaryocytic thrombocytopenia	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 59	1 in 5,800	1 in 23,000
		East Asian	99	1 in 294	1 in 29,000	1 in 120,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 278	1 in 28,000	1 in 110,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	1 in 301	1 in 30,000	1 in 120,000
		US general population	99	1 in 340	1 in 34,000	1 in 140,000
MPV17	Mitochondrial DNA depletion syndrome, MPV17-related	African American/Black	99	1 in 468	1 in 47,000	1 in 190,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
MTHFD1	Severe combined immunodeficiency (SCID)	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 464	1 in 46,000	1 in 180,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
MTM1	Myotubular myopathy	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
MTRR	Homocystinuria	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	97	1 in 467	1 in 16,000	1 in 64,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
MTTP	Abetalipoproteinemia	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 187	1 in 19,000	1 in 76,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
MVK	Mevalonate kinase deficiency	African American/Black	99	1 in 332	1 in 33,000	1 in 130,000
		Latino/Admixed American	99	1 in 281	1 in 28,000	1 in 110,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	1 in 341	1 in 34,000	1 in 140,000
		Non-Finnish European/White	99	1 in 156	1 in 16,000	1 in 64,000
		South Asian	99	1 in 365	1 in 36,000	1 in 140,000
		Other (population not assigned)	99	1 in 254	1 in 25,000	1 in 100,000
US general population	99	1 in 194	1 in 19,000	1 in 76,000		
MYO7A	Usher syndrome (hearing loss and retinitis pigmentosa)	African American/Black	99	1 in 169	1 in 17,000	1 in 68,000
		Latino/Admixed American	99	1 in 300	1 in 30,000	1 in 120,000
		Ashkenazi Jewish	99	1 in 380	1 in 38,000	1 in 150,000
		East Asian	99	1 in 297	1 in 30,000	1 in 120,000
		Finnish	97	1 in 319	1 in 11,000	1 in 44,000
		Non-Finnish European/White	99	1 in 158	1 in 16,000	1 in 64,000
		South Asian	99	1 in 215	1 in 21,000	1 in 84,000
		Other (population not assigned)	98	1 in 270	1 in 13,000	1 in 52,000
US general population	99	1 in 181	1 in 18,000	1 in 72,000		

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
NAGA	Schindler disease	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	1 in 410	1 in 41,000	1 in 160,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	1 in 349	1 in 35,000	1 in 140,000
		Non-Finnish European/White	99	1 in 115	1 in 11,000	1 in 44,000
		South Asian	99	1 in 165	1 in 16,000	1 in 64,000
		Other (population not assigned)	99	1 in 131	1 in 13,000	1 in 52,000
		US general population	99	1 in 160	1 in 16,000	1 in 64,000
NAGLU	Mucopolysaccharidosis type III	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 466	1 in 47,000	1 in 190,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	1 in 344	1 in 34,000	1 in 140,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 425	1 in 42,000	1 in 170,000
NAGS	N-acetylglutamate synthetase deficiency	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
NBAS	Acute infantile liver failure	African American/Black	98	1 in 198	1 in 9,900	1 in 40,000
		Latino/Admixed American	98	1 in 228	1 in 11,000	1 in 44,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 212	1 in 21,000	1 in 84,000
		Finnish	98	1 in 244	1 in 12,000	1 in 48,000
		Non-Finnish European/White	99	1 in 105	1 in 10,000	1 in 40,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	1 in 118	1 in 5,900	1 in 24,000
		US general population	99	1 in 130	1 in 13,000	1 in 52,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
NBN	Nijmegen breakage syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	1 in 435	1 in 43,000	1 in 170,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	1 in 399	1 in 40,000	1 in 160,000
		Non-Finnish European/White	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		NCF2	Chronic granulomatous disease	African American/Black	97	< 1 in 500
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
Finnish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Non-Finnish European/White	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
South Asian	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
Other (population not assigned)	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
NCF4	Chronic granulomatous disease	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 491	1 in 49,000	1 in 200,000
NDUFAF2	Leigh syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
NDUFA5	Leigh syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 143	1 in 14,000	1 in 56,000
		East Asian	99	1 in 148	1 in 15,000	1 in 60,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	1 in 383	1 in 38,000	1 in 150,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 454	1 in 45,000	1 in 180,000
NDUFS4	Leigh syndrome	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
NDUFS6	Leigh syndrome	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
NDUFS7	Leigh syndrome	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
NDUFV1	Leigh syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	1 in 113	1 in 11,000	1 in 44,000
		Non-Finnish European/White	99	1 in 465	1 in 46,000	1 in 180,000
		South Asian	99	1 in 348	1 in 35,000	1 in 140,000
		Other (population not assigned)	99	1 in 402	1 in 40,000	1 in 160,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
NEB	Nemaline myopathy	African American/Black	93	1 in 125	1 in 1,800	1 in 7,200
		Latino/Admixed American	99	1 in 256	1 in 26,000	1 in 100,000
		Ashkenazi Jewish	99	1 in 304	1 in 30,000	1 in 120,000
		East Asian	98	1 in 273	1 in 14,000	1 in 56,000
		Finnish	99	1 in 139	1 in 14,000	1 in 56,000
		Non-Finnish European/White	92	1 in 137	1 in 1,700	1 in 6,800
		South Asian	98	1 in 234	1 in 12,000	1 in 48,000
		Other (population not assigned)	99	1 in 133	1 in 13,000	1 in 52,000
		US general population	99	1 in 152	1 in 15,000	1 in 60,000
NEU1	Sialidosis	African American/Black	99	1 in 427	1 in 43,000	1 in 170,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 308	1 in 31,000	1 in 120,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
NGLY1	Congenital disorder of deglycosylation	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	1 in 444	1 in 22,000	1 in 88,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
NHEJ1	Severe combined immunodeficiency (SCID)	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
NIPAL4	Autosomal recessive congenital ichthyosis (ARCI)	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 391	1 in 39,000	1 in 160,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
NONO	Intellectual developmental disorder, NONO-related	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
NPC1	Niemann-Pick disease type C	African American/Black	99	1 in 421	1 in 42,000	1 in 170,000
		Latino/Admixed American	99	1 in 386	1 in 39,000	1 in 160,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 444	1 in 44,000	1 in 180,000
		Finnish	98	1 in 438	1 in 22,000	1 in 88,000
		Non-Finnish European/White	99	1 in 231	1 in 23,000	1 in 92,000
		South Asian	99	1 in 414	1 in 41,000	1 in 160,000
		Other (population not assigned)	99	1 in 359	1 in 36,000	1 in 140,000
		US general population	99	1 in 276	1 in 27,000	1 in 110,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
NPC2	Niemann-Pick disease type C	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		NPHP1	Joubert syndrome and related disorders, including Meckel-Gruber syndrome	African American/Black	99	1 in 365
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Non-Finnish European/White	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
South Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
NPHP3	Joubert syndrome and related disorders, including Meckel-Gruber syndrome	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 232	1 in 23,000	1 in 92,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	1 in 303	1 in 15,000	1 in 60,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	98	1 in 419	1 in 21,000	1 in 84,000
NPHS1	Nephrotic syndrome	African American/Black	98	1 in 304	1 in 15,000	1 in 60,000
		Latino/Admixed American	99	1 in 398	1 in 40,000	1 in 160,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	1 in 38	1 in 1,200	1 in 4,800
		Non-Finnish European/White	99	1 in 206	1 in 21,000	1 in 84,000
		South Asian	98	1 in 355	1 in 18,000	1 in 72,000
		Other (population not assigned)	99	1 in 213	1 in 21,000	1 in 84,000
		US general population	99	1 in 245	1 in 24,000	1 in 96,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
NPHS2	Nephrotic syndrome	African American/Black	99	1 in 489	1 in 49,000	1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 261	1 in 26,000	1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 386	1 in 39,000	1 in 160,000
		US general population	99	1 in 351	1 in 35,000	1 in 140,000
NROB1	Congenital adrenal hypoplasia, X-linked	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	97	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
US general population	97	N/A	N/A	N/A		
NTRK1	Congenital insensitivity to pain with anhidrosis	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	1 in 343	1 in 34,000	1 in 140,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000		
OAT	Gyrate atrophy of choroid and retina	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000		

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
OBSL1	3M syndrome	African American/Black	98	1 in 186	1 in 9,300	1 in 37,000
		Latino/Admixed American	99	1 in 332	1 in 33,000	1 in 130,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	97	1 in 220	1 in 7,300	1 in 29,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	1 in 209	1 in 10,000	1 in 40,000
		South Asian	97	1 in 299	1 in 9,900	1 in 40,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	1 in 226	1 in 11,000	1 in 44,000
		OCA2	Oculocutaneous albinism	African American/Black	98	1 in 49
Latino/Admixed American	99			1 in 153	1 in 15,000	1 in 60,000
Ashkenazi Jewish	99			1 in 91	1 in 9,000	1 in 36,000
East Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish	99			1 in 392	1 in 39,000	1 in 160,000
Non-Finnish European/White	99			1 in 73	1 in 7,200	1 in 29,000
South Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)	99			1 in 120	1 in 12,000	1 in 48,000
US general population	99			1 in 80	1 in 7,900	1 in 32,000
OCRL	Dent disease	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
US general population	99	N/A	N/A	N/A		
OPA3	Costeff syndrome	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
OSTM1	Osteopetrosis	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
OTC	Ornithine transcarbamylase deficiency	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
US general population	99	N/A	N/A	N/A		
OTOF	Deafness and hearing loss, nonsyndromic	African American/Black	99	1 in 269	1 in 27,000	1 in 110,000
		Latino/Admixed American	99	1 in 348	1 in 35,000	1 in 140,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 400	1 in 40,000	1 in 160,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 279	1 in 28,000	1 in 110,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 293	1 in 29,000	1 in 120,000
US general population	99	1 in 295	1 in 29,000	1 in 120,000		
P3H1	Osteogenesis imperfecta, autosomal recessive	African American/Black	99	1 in 157	1 in 16,000	1 in 64,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000		

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PAH	Phenylalanine hydroxylase deficiency, includes phenylketonuria (PKU)	African American/Black	99	1 in 135	1 in 13,000	1 in 52,000
		Latino/Admixed American	99	1 in 74	1 in 7,300	1 in 29,000
		Ashkenazi Jewish	99	1 in 17	1 in 1,600	1 in 6,400
		East Asian	99	1 in 83	1 in 8,200	1 in 33,000
		Finnish	99	1 in 172	1 in 17,000	1 in 68,000
		Non-Finnish European/White	99	1 in 39	1 in 3,800	1 in 15,000
		South Asian	99	1 in 82	1 in 8,100	1 in 32,000
		Other (population not assigned)	99	1 in 41	1 in 4,000	1 in 16,000
		US general population	99	1 in 49	1 in 4,800	1 in 19,000
PANK2	Pantothenate kinase-associated neurodegeneration	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	98	1 in 444	1 in 22,000	1 in 88,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	97	1 in 427	1 in 14,000	1 in 56,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PC	Pyruvate carboxylase deficiency	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PCBD1	Tetrahydrobiopterin deficiency	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 399	1 in 40,000	1 in 160,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PCCA	Propionic acidemia	African American/Black	99	1 in 494	1 in 49,000	1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PCCB	Propionic acidemia	African American/Black	97	1 in 274	1 in 9,100	1 in 36,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 265	1 in 26,000	1 in 100,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	1 in 488	1 in 24,000	1 in 96,000
PCDH15	Usher syndrome (hearing loss and retinitis pigmentosa)	African American/Black	98	1 in 423	1 in 21,000	1 in 84,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	1 in 116	1 in 12,000	1 in 48,000
		East Asian	97	1 in 206	1 in 6,800	1 in 27,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	1 in 397	1 in 20,000	1 in 80,000
		South Asian	97	1 in 476	1 in 16,000	1 in 64,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PDHA1	Pyruvate dehydrogenase deficiency	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	97	N/A	N/A	N/A
		Finnish	97	N/A	N/A	N/A
		Non-Finnish European/White	97	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
US general population	97	N/A	N/A	N/A		

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PDHB	Pyruvate dehydrogenase deficiency	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		PDHX	Pyruvate dehydrogenase deficiency	African American/Black	99	< 1 in 500
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	97			< 1 in 500	< 1 in 17,000	< 1 in 68,000
East Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
Non-Finnish European/White	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
South Asian	97			< 1 in 500	< 1 in 17,000	< 1 in 68,000
Other (population not assigned)	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
PDP1	Pyruvate dehydrogenase deficiency			African American/Black	99	< 1 in 500
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PEX1	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	97	1 in 392	1 in 13,000	1 in 52,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	1 in 204	1 in 10,000	1 in 40,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	1 in 393	1 in 20,000	1 in 80,000
		US general population	98	1 in 266	1 in 13,000	1 in 52,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PEX2	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	1 in 208	1 in 21,000	1 in 84,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PEX3	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PEX5	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PEX6	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	1 in 470	1 in 23,000	1 in 92,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PEX7	Rhizomelic chondrodysplasia punctata	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 429	1 in 43,000	1 in 170,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PEX10	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PEX11B	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
PEX12	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	98	1 in 437	1 in 22,000	1 in 88,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000		

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PEX13	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PEX14	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PEX16	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PEX19	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PEX26	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PFKM	Glycogen storage disease type VII	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	98	1 in 100	1 in 5,000	1 in 20,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PGM3	Severe combined immunodeficiency (SCID)	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PHGDH	Phosphoglycerate dehydrogenase deficiency	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	1 in 324	1 in 32,000	1 in 130,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PHKA1	Glycogen storage disease type IX	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	98	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
PHKA2	Glycogen storage disease type IX	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
PHKB	Glycogen storage disease type IX	African American/Black	98	1 in 433	1 in 22,000	1 in 88,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 478	1 in 48,000	1 in 190,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 399	1 in 40,000	1 in 160,000
		South Asian	99	1 in 309	1 in 31,000	1 in 120,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 427	1 in 43,000	1 in 170,000
PHKG2	Glycogen storage disease type IX	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	97	1 in 356	1 in 12,000	1 in 48,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PKHD1	Polycystic kidney disease, autosomal recessive	African American/Black	99	1 in 153	1 in 15,000	1 in 60,000
		Latino/Admixed American	98	1 in 144	1 in 7,200	1 in 29,000
		Ashkenazi Jewish	97	1 in 62	1 in 2,000	1 in 8,000
		East Asian	99	1 in 184	1 in 18,000	1 in 72,000
		Finnish	99	1 in 38	1 in 3,700	1 in 15,000
		Non-Finnish European/White	99	1 in 92	1 in 9,100	1 in 36,000
		South Asian	99	1 in 187	1 in 19,000	1 in 76,000
		Other (population not assigned)	99	1 in 96	1 in 9,500	1 in 38,000
		US general population	99	1 in 107	1 in 11,000	1 in 44,000
PLA2G6	Neurodegeneration with brain iron accumulation disorder	African American/Black	99	1 in 303	1 in 30,000	1 in 120,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 255	1 in 25,000	1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	1 in 474	1 in 47,000	1 in 190,000
		South Asian	99	1 in 411	1 in 41,000	1 in 160,000
		Other (population not assigned)	98	1 in 403	1 in 20,000	1 in 80,000
		US general population	99	1 in 454	1 in 45,000	1 in 180,000
PLEKHG5	Distal spinal muscular atrophy	African American/Black	97	1 in 76	1 in 2,500	1 in 10,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	1 in 428	1 in 43,000	1 in 170,000
		US general population	98	1 in 358	1 in 18,000	1 in 72,000
PLOD2	Osteogenesis imperfecta, autosomal recessive	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	1 in 261	1 in 26,000	1 in 100,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PLP1	Pelizaeus-Merzbacher disease	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A
PMM2	Congenital disorders of glycosylation	African American/Black	99	1 in 225	1 in 22,000	1 in 88,000
		Latino/Admixed American	99	1 in 116	1 in 12,000	1 in 48,000
		Ashkenazi Jewish	99	1 in 65	1 in 6,400	1 in 26,000
		East Asian	99	1 in 157	1 in 16,000	1 in 64,000
		Finnish	99	1 in 58	1 in 5,700	1 in 23,000
		Non-Finnish European/White	99	1 in 63	1 in 6,200	1 in 25,000
		South Asian	99	1 in 259	1 in 26,000	1 in 100,000
		Other (population not assigned)	99	1 in 81	1 in 8,000	1 in 32,000
		US general population	99	1 in 80	1 in 7,900	1 in 32,000
PNP	Severe combined immunodeficiency (SCID)	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PNPLA1	Autosomal recessive congenital ichthyosis (ARCI)	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	1 in 492	1 in 49,000	1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PNPO	Pyridoxal 5'-phosphate-dependent epilepsy	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
POLG	POLG-related disorders	African American/Black	99	1 in 144	1 in 14,000	1 in 56,000
		Latino/Admixed American	99	1 in 171	1 in 17,000	1 in 68,000
		Ashkenazi Jewish	99	1 in 115	1 in 11,000	1 in 44,000
		East Asian	99	1 in 53	1 in 5,200	1 in 21,000
		Finnish	99	1 in 62	1 in 6,100	1 in 24,000
		Non-Finnish European/White	99	1 in 49	1 in 4,800	1 in 19,000
		South Asian	99	1 in 255	1 in 25,000	1 in 100,000
		Other (population not assigned)	99	1 in 67	1 in 6,600	1 in 26,000
		US general population	99	1 in 64	1 in 6,300	1 in 25,000
POLH	Xeroderma pigmentosum	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	1 in 488	1 in 49,000	1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
POMGNT1	Limb-girdle muscular dystrophy	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	1 in 202	1 in 20,000	1 in 80,000
		Non-Finnish European/White	99	1 in 313	1 in 31,000	1 in 120,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	1 in 414	1 in 41,000	1 in 160,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
POMT1	Limb-girdle muscular dystrophy	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	1 in 301	1 in 10,000	1 in 40,000
		East Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	1 in 449	1 in 22,000	1 in 88,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	98	1 in 458	1 in 23,000	1 in 92,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		POMT2	Limb-girdle muscular dystrophy	African American/Black	99	< 1 in 500
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Non-Finnish European/White	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
South Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
US general population	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
POR	Congenital adrenal hyperplasia			African American/Black	98	1 in 450
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	1 in 273	1 in 14,000	1 in 56,000
		Non-Finnish European/White	99	1 in 312	1 in 31,000	1 in 120,000
		South Asian	98	1 in 456	1 in 23,000	1 in 92,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
POU3F4	Deafness and hearing loss, nonsyndromic	African American/Black	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/White	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	99	N/A	N/A	N/A
		US general population	99	N/A	N/A	N/A

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PPIB	Osteogenesis imperfecta, autosomal recessive	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		US general population	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		PPT1	Neuronal ceroid-lipofuscinosis	African American/Black	99	< 1 in 500
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Finnish	99			1 in 74	1 in 7,300	1 in 29,000
Non-Finnish European/White	99			1 in 304	1 in 30,000	1 in 120,000
South Asian	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Other (population not assigned)	99			1 in 190	1 in 19,000	1 in 76,000
US general population	99			1 in 427	1 in 43,000	1 in 170,000
PRCD	Retinitis pigmentosa	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PRDMS	Brittle cornea syndrome	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PRF1	Familial hemophagocytic lymphohistiocytosis	African American/Black	97	1 in 127	1 in 4,200	1 in 17,000
		Latino/Admixed American	99	1 in 373	1 in 37,000	1 in 150,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	1 in 499	1 in 50,000	1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	99	1 in 364	1 in 36,000	1 in 140,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	1 in 399	1 in 20,000	1 in 80,000
PRKDC	Severe combined immunodeficiency (SCID)	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PROP1	Combined pituitary hormone deficiency	African American/Black	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
PSAP	Metachromatic leukodystrophy	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PTPRC	Severe combined immunodeficiency (SCID)	African American/Black	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Latino/Admixed American	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Other (population not assigned)	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		US general population	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		PTS	Tetrahydrobiopterin deficiency	African American/Black	97	< 1 in 500
Latino/Admixed American	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Ashkenazi Jewish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
East Asian	99			1 in 118	1 in 12,000	1 in 48,000
Finnish	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
Non-Finnish European/White	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
South Asian	98			< 1 in 500	< 1 in 25,000	< 1 in 100,000
Other (population not assigned)	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
US general population	99			< 1 in 500	< 1 in 50,000	< 1 in 200,000
PUS1	Mitochondrial myopathy, lactic acidosis, and sideroblastic anemia	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Ashkenazi Jewish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Non-Finnish European/White	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		South Asian	98	< 1 in 500	< 1 in 25,000	< 1 in 100,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
PYCR1	Cutis laxa	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	97	< 1 in 500	< 1 in 17,000	< 1 in 68,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000

Gene	Disorder	Ethnicity	Detection Rate (%)	Individual Carrier Risk	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PYGM	Glycogen storage disease type V	African American/Black	99	1 in 220	1 in 22,000	1 in 88,000
		Latino/Admixed American	99	1 in 157	1 in 16,000	1 in 64,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	1 in 491	1 in 49,000	1 in 200,000
		Finnish	99	1 in 496	1 in 50,000	1 in 200,000
		Non-Finnish European/White	99	1 in 128	1 in 13,000	1 in 52,000
		South Asian	98	1 in 490	1 in 24,000	1 in 96,000
		Other (population not assigned)	99	1 in 167	1 in 17,000	1 in 68,000
		US general population	99	1 in 147	1 in 15,000	1 in 60,000
QDPR	Tetrahydrobiopterin deficiency	African American/Black	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Latino/Admixed American	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Ashkenazi Jewish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		East Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Finnish	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Non-Finnish European/White	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		South Asian	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		Other (population not assigned)	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000
		US general population	99	< 1 in 500	< 1 in 50,000	< 1 in 200,000