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 and ClinVar, and the rates were extrapolated using appropriate scientific methodologies. As additional clinical evidence is available, the data in these charts may be updated from time to time. This data is provided for general informational purposes only and is not intended as a substitute for professional medical judgment or medical advice.

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Gene	Disorder	Ethnicity (Source: https://gnomad.broadinstitute.org/ except CYP21A2 and HBA1/HBA2)	Detection Rate (%) (Derived from gnomAD and ClinVar except CYP21A2, GBA, and HBA1/HBA2)	Individual Carrier Risk Before Testing (Derived from gnomAD and ClinVar except CYP21A2 and HBA1/HBA2)	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/African American	99	1 in 2,602	1 in 260,000	1 in 1,000,000
		Latino/Admixed American	99	1 in 405	1 in 40,000	1 in 160,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	99	1 in 1,301	1 in 130,000	1 in 520,000
		Finnish	99	1 in 1,389	1 in 140,000	1 in 560,000
		Non-Finnish European/Caucasian	98	1 in 1,167	1 in 58,000	1 in 230,000
		South Asian	99	1 in 3,071	1 in 310,000	1 in 1,200,000
		Other (population not assigned)	99	1 in 239	1 in 24,000	1 in 96,000
KCTD7	Neuronal ceroid-lipofuscinosis	African/African American	99	1 in 1,971	1 in 200,000	1 in 800,000
		Latino/Admixed American	99	1 in 1,022	1 in 100,000	1 in 400,000
		Ashkenazi Jewish	98	1 in 2,520	1 in 130,000	1 in 520,000
		East Asian	99	1 in 2,659	1 in 270,000	1 in 1,100,000
		Finnish	99	1 in 5,373	1 in 540,000	1 in 2,200,000
		Non-Finnish European/Caucasian	99	1 in 1,083	1 in 110,000	1 in 440,000
		South Asian	99	1 in 1,116	1 in 110,000	1 in 440,000
		Other (population not assigned)	98	1 in 301	1 in 15,000	1 in 60,000
KIF14	Joubert syndrome and related disorders, including Meckel-Gruber syndrome	African/African American	98	1 in 666	1 in 33,000	1 in 130,000
		Latino/Admixed American	98	1 in 1,218	1 in 61,000	1 in 240,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	97	1 in 599	1 in 20,000	1 in 80,000
		Finnish	97	1 in 2,690	1 in 90,000	1 in 360,000
		Non-Finnish European/Caucasian	98	1 in 1,010	1 in 50,000	1 in 200,000
		South Asian	97	1 in 362	1 in 12,000	1 in 48,000
		Other (population not assigned)	98	1 in 767	1 in 38,000	1 in 150,000
L1CAM	L1 syndrome	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	98	N/A	N/A	N/A
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	97	N/A	N/A	N/A
		Non-Finnish European/Caucasian	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
LAMA2	Muscular dystrophy, LAMA2-related	African/African American	99	1 in 114	1 in 11,000	1 in 44,000
		Latino/Admixed American	98	1 in 159	1 in 7,900	1 in 32,000
		Ashkenazi Jewish	99	1 in 312	1 in 31,000	1 in 120,000
		East Asian	99	1 in 122	1 in 12,000	1 in 48,000
		Finnish	98	1 in 915	1 in 46,000	1 in 180,000
		Non-Finnish European/Caucasian	98	1 in 273	1 in 14,000	1 in 56,000
		South Asian	98	1 in 306	1 in 15,000	1 in 60,000
		Other (population not assigned)	99	1 in 299	1 in 30,000	1 in 120,000
LAMA3	Junctional epidermolysis bullosa	African/African American	99	1 in 348	1 in 35,000	1 in 140,000
		Latino/Admixed American	99	1 in 288	1 in 29,000	1 in 120,000
		Ashkenazi Jewish	99	1 in 5,030	1 in 500,000	1 in 2,000,000

Footnotes:

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a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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		East Asian	99	1 in 70	1 in 6,900	1 in 28,000
		Finnish	97	1 in 1,502	1 in 50,000	1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 320	1 in 32,000	1 in 130,000
		South Asian	98	1 in 201	1 in 10,000	1 in 40,000
		Other (population not assigned)	99	1 in 760	1 in 76,000	1 in 300,000
LAMB3	Junctional epidermolysis bullosa	African/African American	99	1 in 172	1 in 17,000	1 in 68,000
		Latino/Admixed American	98	1 in 1,012	1 in 51,000	1 in 200,000
		Ashkenazi Jewish	99	1 in 1,001	1 in 100,000	1 in 400,000
		East Asian	98	1 in 1,007	1 in 50,000	1 in 200,000
		Finnish	98	1 in 1,007	1 in 50,000	1 in 200,000
		Non-Finnish European/Caucasian	99	1 in 252	1 in 25,000	1 in 100,000
		South Asian	98	1 in 603	1 in 30,000	1 in 120,000
		Other (population not assigned)	99	1 in 725	1 in 72,000	1 in 290,000
LAMC2	Junctional epidermolysis bullosa	African/African American	99	1 in 2,653	1 in 270,000	1 in 1,100,000
		Latino/Admixed American	99	1 in 3,438	1 in 340,000	1 in 1,400,000
		Ashkenazi Jewish	98	1 in 2,489	1 in 120,000	1 in 480,000
		East Asian	99	1 in 1,022	1 in 100,000	1 in 400,000
		Finnish	99	1 in 10,825	1 in 1,100,000	1 in 4,400,000
		Non-Finnish European/Caucasian	98	1 in 1,067	1 in 53,000	1 in 210,000
		South Asian	98	1 in 1,093	1 in 55,000	1 in 220,000
		Other (population not assigned)	98	1 in 1,535	1 in 77,000	1 in 310,000
LAMP2	Danon disease	African/African American	97	N/A	N/A	N/A
		Latino/Admixed American	97	N/A	N/A	N/A
		Ashkenazi Jewish	97	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/Caucasian	99	N/A	N/A	N/A
		South Asian	99	N/A	N/A	N/A
		Other (population not assigned)	97	N/A	N/A	N/A
LARS	Acute infantile liver failure	African/African American	99	1 in 728	1 in 73,000	1 in 290,000
		Latino/Admixed American	99	1 in 474	1 in 47,000	1 in 190,000
		Ashkenazi Jewish	99	1 in 2,516	1 in 250,000	1 in 1,000,000
		East Asian	98	1 in 1,007	1 in 50,000	1 in 200,000
		Finnish	99	1 in 1,820	1 in 180,000	1 in 720,000
		Non-Finnish European/Caucasian	99	1 in 1,000	1 in 100,000	1 in 400,000
		South Asian	99	1 in 948	1 in 95,000	1 in 380,000
		Other (population not assigned)	99	1 in 479	1 in 48,000	1 in 190,000
LCA5	Leber congenital amaurosis	African/African American	97	1 in 8,124	1 in 270,000	1 in 1,100,000
		Latino/Admixed American	98	1 in 1,862	1 in 93,000	1 in 370,000
		Ashkenazi Jewish	99	1 in 235	1 in 23,000	1 in 92,000
		East Asian	98	1 in 1,310	1 in 65,000	1 in 260,000
		Finnish	97	1 in 10,822	1 in 360,000	1 in 1,400,000
		Non-Finnish European/Caucasian	98	1 in 1,955	1 in 98,000	1 in 390,000

Footnotes:

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a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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		South Asian	98	1 in 1,899	1 in 95,000	1 in 380,000
		Other (population not assigned)	99	1 in 721	1 in 72,000	1 in 290,000
LCK	Severe combined immunodeficiency (SCID)	African/African American	98	1 in 2,186	1 in 110,000	1 in 440,000
		Latino/Admixed American	97	1 in 248	1 in 8,200	1 in 33,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	97	N/A	N/A	N/A
		Finnish	97	1 in 10,069	1 in 340,000	1 in 1,400,000
		Non-Finnish European/Caucasian	99	1 in 3,606	1 in 360,000	1 in 1,400,000
		South Asian	97	N/A	N/A	N/A
		Other (population not assigned)	98	1 in 982	1 in 49,000	1 in 200,000
LIG4	Severe combined immunodeficiency (SCID)	African/African American	97	1 in 310	1 in 10,000	1 in 40,000
		Latino/Admixed American	97	1 in 807	1 in 27,000	1 in 110,000
		Ashkenazi Jewish	99	1 in 5,029	1 in 500,000	1 in 2,000,000
		East Asian	99	1 in 812	1 in 81,000	1 in 320,000
		Finnish	98	1 in 5,507	1 in 280,000	1 in 1,100,000
		Non-Finnish European/Caucasian	98	1 in 580	1 in 29,000	1 in 120,000
		South Asian	98	1 in 766	1 in 38,000	1 in 150,000
		Other (population not assigned)	97	1 in 482	1 in 16,000	1 in 64,000
LIPA	Lysosomal acid lipase deficiency	African/African American	99	1 in 319	1 in 32,000	1 in 130,000
		Latino/Admixed American	99	1 in 104	1 in 10,000	1 in 40,000
		Ashkenazi Jewish	99	1 in 451	1 in 45,000	1 in 180,000
		East Asian	99	1 in 279	1 in 28,000	1 in 110,000
		Finnish	99	1 in 781	1 in 78,000	1 in 310,000
		Non-Finnish European/Caucasian	99	1 in 127	1 in 13,000	1 in 52,000
		South Asian	99	1 in 357	1 in 36,000	1 in 140,000
		Other (population not assigned)	99	1 in 180	1 in 18,000	1 in 72,000
LIPN	Autosomal recessive congenital ichthyosis (ARCI)	African/African American	99	1 in 115	1 in 11,000	1 in 44,000
		Latino/Admixed American	99	1 in 602	1 in 60,000	1 in 240,000
		Ashkenazi Jewish	97	1 in 143	1 in 4,700	1 in 19,000
		East Asian	99	1 in 2,172	1 in 220,000	1 in 880,000
		Finnish	99	1 in 459	1 in 46,000	1 in 180,000
		Non-Finnish European/Caucasian	99	1 in 335	1 in 33,000	1 in 130,000
		South Asian	97	1 in 2,776	1 in 93,000	1 in 370,000
		Other (population not assigned)	99	1 in 224	1 in 22,000	1 in 88,000
LMBRD1	Methylmalonic acidemia with homocystinuria	African/African American	99	1 in 363	1 in 36,000	1 in 140,000
		Latino/Admixed American	98	1 in 1,035	1 in 52,000	1 in 210,000
		Ashkenazi Jewish	97	1 in 5,035	1 in 170,000	1 in 680,000
		East Asian	98	1 in 1,835	1 in 92,000	1 in 370,000
		Finnish	97	1 in 789	1 in 26,000	1 in 100,000
		Non-Finnish European/Caucasian	97	1 in 414	1 in 14,000	1 in 56,000
		South Asian	99	1 in 2,536	1 in 250,000	1 in 1,000,000
		Other (population not assigned)	97	1 in 715	1 in 24,000	1 in 96,000
LOXHD1	Deafness and hearing loss, nonsyndromic	African/African American	98	1 in 276	1 in 14,000	1 in 56,000

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		Latino/Admixed American	98	1 in 224	1 in 11,000	1 in 44,000
		Ashkenazi Jewish	99	1 in 122	1 in 12,000	1 in 48,000
		East Asian	99	1 in 252	1 in 25,000	1 in 100,000
		Finnish	99	1 in 323	1 in 32,000	1 in 130,000
		Non-Finnish European/Caucasian	99	1 in 169	1 in 17,000	1 in 68,000
		South Asian	99	1 in 209	1 in 21,000	1 in 84,000
		Other (population not assigned)	99	1 in 359	1 in 36,000	1 in 140,000
LPL	Lipoprotein lipase deficiency, familial	African/African American	99	1 in 145	1 in 14,000	1 in 56,000
		Latino/Admixed American	99	1 in 68	1 in 6,700	1 in 27,000
		Ashkenazi Jewish	99	1 in 47	1 in 4,600	1 in 18,000
		East Asian	99	1 in 1,452	1 in 150,000	1 in 600,000
		Finnish	99	1 in 25	1 in 2,400	1 in 9,600
		Non-Finnish European/Caucasian	99	1 in 25	1 in 2,400	1 in 9,600
		South Asian	99	1 in 214	1 in 21,000	1 in 84,000
		Other (population not assigned)	99	1 in 33	1 in 3,200	1 in 13,000
LRAT	Leber congenital amaurosis	African/African American	99	1 in 8,129	1 in 810,000	1 in 3,200,000
		Latino/Admixed American	97	1 in 3,459	1 in 120,000	1 in 480,000
		Ashkenazi Jewish	97	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/Caucasian	98	1 in 7,035	1 in 350,000	1 in 1,400,000
		South Asian	97	1 in 15,307	1 in 510,000	1 in 2,000,000
		Other (population not assigned)	97	N/A	N/A	N/A
LRP2	Donnai-Barrow syndrome	African/African American	99	1 in 334	1 in 33,000	1 in 130,000
		Latino/Admixed American	99	1 in 403	1 in 40,000	1 in 160,000
		Ashkenazi Jewish	99	1 in 171	1 in 17,000	1 in 68,000
		East Asian	99	1 in 825	1 in 82,000	1 in 330,000
		Finnish	99	1 in 408	1 in 41,000	1 in 160,000
		Non-Finnish European/Caucasian	99	1 in 260	1 in 26,000	1 in 100,000
		South Asian	99	1 in 405	1 in 40,000	1 in 160,000
		Other (population not assigned)	99	1 in 254	1 in 25,000	1 in 100,000
LRPPRC	Leigh syndrome, autosomal recessive	African/African American	98	1 in 650	1 in 32,000	1 in 130,000
		Latino/Admixed American	99	1 in 591	1 in 59,000	1 in 240,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	97	1 in 225	1 in 7,500	1 in 30,000
		Finnish	97	1 in 428	1 in 14,000	1 in 56,000
		Non-Finnish European/Caucasian	99	1 in 789	1 in 79,000	1 in 320,000
		South Asian	98	1 in 754	1 in 38,000	1 in 150,000
		Other (population not assigned)	98	1 in 239	1 in 12,000	1 in 48,000
LTBP4	Cutis laxa	African/African American	98	1 in 2,394	1 in 120,000	1 in 480,000
		Latino/Admixed American	98	1 in 1,803	1 in 90,000	1 in 360,000
		Ashkenazi Jewish	99	1 in 4,859	1 in 490,000	1 in 2,000,000
		East Asian	99	1 in 229	1 in 23,000	1 in 92,000

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		Finnish	98	1 in 2,490	1 in 120,000	1 in 480,000
		Non-Finnish European/Caucasian	99	1 in 64	1 in 6,300	1 in 25,000
		South Asian	99	1 in 907	1 in 91,000	1 in 360,000
		Other (population not assigned)	97	1 in 1,432	1 in 48,000	1 in 190,000
MAK	Retinitis pigmentosa	African/African American	98	1 in 793	1 in 40,000	1 in 160,000
		Latino/Admixed American	99	1 in 786	1 in 79,000	1 in 320,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 511	1 in 51,000	1 in 200,000
		Finnish	99	1 in 5,409	1 in 540,000	1 in 2,200,000
		Non-Finnish European/Caucasian	98	1 in 1,010	1 in 50,000	1 in 200,000
		South Asian	98	1 in 812	1 in 41,000	1 in 160,000
		Other (population not assigned)	97	1 in 1,532	1 in 51,000	1 in 200,000
MALT1	Severe combined immunodeficiency (SCID)	African/African American	97	1 in 2,016	1 in 67,000	1 in 270,000
		Latino/Admixed American	99	1 in 891	1 in 89,000	1 in 360,000
		Ashkenazi Jewish	99	1 in 758	1 in 76,000	1 in 300,000
		East Asian	99	1 in 977	1 in 98,000	1 in 390,000
		Finnish	99	1 in 709	1 in 71,000	1 in 280,000
		Non-Finnish European/Caucasian	99	1 in 680	1 in 68,000	1 in 270,000
		South Asian	97	1 in 579	1 in 19,000	1 in 76,000
		Other (population not assigned)	99	1 in 2,736	1 in 270,000	1 in 1,100,000
MAN2B1	Alpha-mannosidosis	African/African American	99	1 in 333	1 in 33,000	1 in 130,000
		Latino/Admixed American	99	1 in 138	1 in 14,000	1 in 56,000
		Ashkenazi Jewish	99	1 in 5,037	1 in 500,000	1 in 2,000,000
		East Asian	98	1 in 900	1 in 45,000	1 in 180,000
		Finnish	99	1 in 206	1 in 21,000	1 in 84,000
		Non-Finnish European/Caucasian	99	1 in 475	1 in 47,000	1 in 190,000
		South Asian	99	1 in 831	1 in 83,000	1 in 330,000
		Other (population not assigned)	99	1 in 371	1 in 37,000	1 in 150,000
MANBA	Beta-mannosidosis	African/African American	98	1 in 345	1 in 17,000	1 in 68,000
		Latino/Admixed American	99	1 in 1,057	1 in 110,000	1 in 440,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	99	1 in 1,513	1 in 150,000	1 in 600,000
		Finnish	99	1 in 2,705	1 in 270,000	1 in 1,100,000
		Non-Finnish European/Caucasian	99	1 in 684	1 in 68,000	1 in 270,000
		South Asian	98	1 in 1,028	1 in 51,000	1 in 200,000
		Other (population not assigned)	98	1 in 511	1 in 26,000	1 in 100,000
MCCC1	3-Methylcrotonyl-CoA carboxylase deficiency	African/African American	99	1 in 370	1 in 37,000	1 in 150,000
		Latino/Admixed American	99	1 in 904	1 in 90,000	1 in 360,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	99	1 in 1,157	1 in 120,000	1 in 480,000
		Finnish	99	1 in 3,682	1 in 370,000	1 in 1,500,000
		Non-Finnish European/Caucasian	98	1 in 528	1 in 26,000	1 in 100,000
		South Asian	99	1 in 417	1 in 42,000	1 in 170,000

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		Other (population not assigned)	99	1 in 536	1 in 54,000	1 in 220,000
MCCC2	3-Methylcrotonyl-CoA carboxylase deficiency	African/African American	99	1 in 374	1 in 37,000	1 in 150,000
		Latino/Admixed American	99	1 in 124	1 in 12,000	1 in 48,000
		Ashkenazi Jewish	99	1 in 187	1 in 19,000	1 in 76,000
		East Asian	99	1 in 294	1 in 29,000	1 in 120,000
		Finnish	99	1 in 1,358	1 in 140,000	1 in 560,000
		Non-Finnish European/Caucasian	99	1 in 182	1 in 18,000	1 in 72,000
		South Asian	99	1 in 480	1 in 48,000	1 in 190,000
		Other (population not assigned)	99	1 in 128	1 in 13,000	1 in 52,000
MCEE	Methylmalonic acidemia	African/African American	97	N/A	N/A	N/A
		Latino/Admixed American	99	1 in 1,878	1 in 190,000	1 in 760,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 2,277	1 in 230,000	1 in 920,000
		Finnish	99	1 in 11,161	1 in 1,100,000	1 in 4,400,000
		Non-Finnish European/Caucasian	99	1 in 873	1 in 87,000	1 in 350,000
		South Asian	97	1 in 7,646	1 in 250,000	1 in 1,000,000
		Other (population not assigned)	99	1 in 2,742	1 in 270,000	1 in 1,100,000
MCOLN1	Mucolipidosis type IV	African/African American	99	1 in 1,566	1 in 160,000	1 in 640,000
		Latino/Admixed American	99	1 in 480	1 in 48,000	1 in 190,000
		Ashkenazi Jewish	99	1 in 112	1 in 11,000	1 in 44,000
		East Asian	99	1 in 2,278	1 in 230,000	1 in 920,000
		Finnish	97	1 in 5,411	1 in 180,000	1 in 720,000
		Non-Finnish European/Caucasian	99	1 in 1,059	1 in 110,000	1 in 440,000
		South Asian	99	1 in 366	1 in 37,000	1 in 150,000
		Other (population not assigned)	99	1 in 612	1 in 61,000	1 in 240,000
MEFV	Familial Mediterranean fever	African/African American	99	1 in 426	1 in 43,000	1 in 170,000
		Latino/Admixed American	99	1 in 246	1 in 25,000	1 in 100,000
		Ashkenazi Jewish	99	1 in 13	1 in 1,200	1 in 4,800
		East Asian	99	1 in 114	1 in 11,000	1 in 44,000
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	1 in 186	1 in 19,000	1 in 76,000
		South Asian	99	1 in 309	1 in 31,000	1 in 120,000
		Other (population not assigned)	99	1 in 64	1 in 6,300	1 in 25,000
MEGF8	Carpenter syndrome	African/African American	99	1 in 719	1 in 72,000	1 in 290,000
		Latino/Admixed American	98	1 in 544	1 in 27,000	1 in 110,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 804	1 in 80,000	1 in 320,000
		Finnish	97	1 in 538	1 in 18,000	1 in 72,000
		Non-Finnish European/Caucasian	99	1 in 375	1 in 37,000	1 in 150,000
		South Asian	99	1 in 783	1 in 78,000	1 in 310,000
		Other (population not assigned)	99	1 in 617	1 in 62,000	1 in 250,000
MESP2	Spondylothoracic dysostosis	African/African American	97	1 in 216	1 in 7,200	1 in 29,000
		Latino/Admixed American	97	1 in 145	1 in 4,800	1 in 19,000

Footnotes:

** includes carriers who are silent carriers (2+0) and carriers with a pathogenic variant not detected in this assay

a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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

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		Ashkenazi Jewish	97	1 in 112	1 in 3,700	1 in 15,000
		East Asian	97	1 in 237	1 in 7,900	1 in 32,000
		Finnish	97	1 in 56	1 in 1,800	1 in 7,200
		Non-Finnish European/Caucasian	97	1 in 126	1 in 4,200	1 in 17,000
		South Asian	97	1 in 168	1 in 5,600	1 in 22,000
		Other (population not assigned)	97	1 in 88	1 in 2,900	1 in 12,000
MFSD8	Neuronal ceroid-lipofuscinosis	African/African American	99	1 in 1,587	1 in 160,000	1 in 640,000
		Latino/Admixed American	99	1 in 1,415	1 in 140,000	1 in 560,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	99	1 in 992	1 in 99,000	1 in 400,000
		Finnish	99	1 in 5,411	1 in 540,000	1 in 2,200,000
		Non-Finnish European/Caucasian	99	1 in 1,661	1 in 170,000	1 in 680,000
		South Asian	99	1 in 3,047	1 in 300,000	1 in 1,200,000
		Other (population not assigned)	98	1 in 611	1 in 31,000	1 in 120,000
MKKS	Bardet-Biedl syndrome	African/African American	99	1 in 260	1 in 26,000	1 in 100,000
		Latino/Admixed American	99	1 in 214	1 in 21,000	1 in 84,000
		Ashkenazi Jewish	99	1 in 458	1 in 46,000	1 in 180,000
		East Asian	99	1 in 920	1 in 92,000	1 in 370,000
		Finnish	99	1 in 118	1 in 12,000	1 in 48,000
		Non-Finnish European/Caucasian	99	1 in 49	1 in 4,800	1 in 19,000
		South Asian	98	1 in 807	1 in 40,000	1 in 160,000
		Other (population not assigned)	99	1 in 133	1 in 13,000	1 in 52,000
MKS1	Ciliopathies	African/African American	99	1 in 515	1 in 51,000	1 in 200,000
		Latino/Admixed American	99	1 in 946	1 in 95,000	1 in 380,000
		Ashkenazi Jewish	99	1 in 1,679	1 in 170,000	1 in 680,000
		East Asian	98	1 in 257	1 in 13,000	1 in 52,000
		Finnish	97	1 in 73	1 in 2,400	1 in 9,600
		Non-Finnish European/Caucasian	98	1 in 228	1 in 11,000	1 in 44,000
		South Asian	99	1 in 180	1 in 18,000	1 in 72,000
		Other (population not assigned)	98	1 in 248	1 in 12,000	1 in 48,000
MLC1	Megalencephalic leukoencephalopathy with subcortical cysts type 1	African/African American	98	1 in 1,404	1 in 70,000	1 in 280,000
		Latino/Admixed American	99	1 in 5,706	1 in 570,000	1 in 2,300,000
		Ashkenazi Jewish	99	1 in 198	1 in 20,000	1 in 80,000
		East Asian	99	1 in 107	1 in 11,000	1 in 44,000
		Finnish	97	1 in 1,201	1 in 40,000	1 in 160,000
		Non-Finnish European/Caucasian	99	1 in 1,234	1 in 120,000	1 in 480,000
		South Asian	99	1 in 326	1 in 33,000	1 in 130,000
		Other (population not assigned)	99	1 in 703	1 in 70,000	1 in 280,000
MMAA	Methylmalonic acidemia	African/African American	99	1 in 7,611	1 in 760,000	1 in 3,000,000
		Latino/Admixed American	99	1 in 2,126	1 in 210,000	1 in 840,000
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	1 in 1,792	1 in 180,000	1 in 720,000
		Finnish	99	1 in 3,715	1 in 370,000	1 in 1,500,000

Footnotes:

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a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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		Non-Finnish European/Caucasian	99	1 in 665	1 in 66,000	1 in 260,000
		South Asian	99	1 in 1,012	1 in 100,000	1 in 400,000
		Other (population not assigned)	99	1 in 947	1 in 95,000	1 in 380,000
MMAB	Methylmalonic acidemia	African/African American	99	1 in 50	1 in 4,900	1 in 20,000
		Latino/Admixed American	99	1 in 606	1 in 61,000	1 in 240,000
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	N/A	N/A	N/A
		Finnish	99	1 in 3,286	1 in 330,000	1 in 1,300,000
		Non-Finnish European/Caucasian	99	1 in 801	1 in 80,000	1 in 320,000
		South Asian	99	1 in 954	1 in 95,000	1 in 380,000
		Other (population not assigned)	98	1 in 317	1 in 16,000	1 in 64,000
MMACHC	Methylmalonic acidemia with homocystinuria	African/African American	98	1 in 284	1 in 14,000	1 in 56,000
		Latino/Admixed American	99	1 in 38	1 in 3,700	1 in 15,000
		Ashkenazi Jewish	97	1 in 206	1 in 6,800	1 in 27,000
		East Asian	98	1 in 229	1 in 11,000	1 in 44,000
		Finnish	99	1 in 10,780	1 in 1,100,000	1 in 4,400,000
		Non-Finnish European/Caucasian	98	1 in 151	1 in 7,500	1 in 30,000
		South Asian	99	1 in 202	1 in 20,000	1 in 80,000
		Other (population not assigned)	98	1 in 127	1 in 6,300	1 in 25,000
MMADHC	Methylmalonic acidemia with homocystinuria	African/African American	99	1 in 3,940	1 in 390,000	1 in 1,600,000
		Latino/Admixed American	98	1 in 5,706	1 in 290,000	1 in 1,200,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	98	1 in 1,835	1 in 92,000	1 in 370,000
		Finnish	99	1 in 809	1 in 81,000	1 in 320,000
		Non-Finnish European/Caucasian	99	1 in 1,515	1 in 150,000	1 in 600,000
		South Asian	97	1 in 282	1 in 9,400	1 in 38,000
		Other (population not assigned)	99	1 in 983	1 in 98,000	1 in 390,000
MMUT	Methylmalonic acidemia	African/African American	99	1 in 182	1 in 18,000	1 in 72,000
		Latino/Admixed American	99	1 in 185	1 in 18,000	1 in 72,000
		Ashkenazi Jewish	99	1 in 353	1 in 35,000	1 in 140,000
		East Asian	99	1 in 178	1 in 18,000	1 in 72,000
		Finnish	99	1 in 1,010	1 in 100,000	1 in 400,000
		Non-Finnish European/Caucasian	99	1 in 409	1 in 41,000	1 in 160,000
		South Asian	99	1 in 82	1 in 8,100	1 in 32,000
		Other (population not assigned)	99	1 in 343	1 in 34,000	1 in 140,000
MPI	Congenital disorders of glycosylation type 1	African/African American	99	1 in 496	1 in 50,000	1 in 200,000
		Latino/Admixed American	99	1 in 202	1 in 20,000	1 in 80,000
		Ashkenazi Jewish	99	1 in 5,039	1 in 500,000	1 in 2,000,000
		East Asian	98	1 in 1,079	1 in 54,000	1 in 220,000
		Finnish	98	1 in 1,096	1 in 55,000	1 in 220,000
		Non-Finnish European/Caucasian	99	1 in 467	1 in 47,000	1 in 190,000
		South Asian	98	1 in 921	1 in 46,000	1 in 180,000
		Other (population not assigned)	99	1 in 280	1 in 28,000	1 in 110,000

Footnotes:

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MPL	Congenital amegakaryocytic thrombocytopenia	African/African American	99	1 in 599	1 in 60,000	1 in 240,000
		Latino/Admixed American	99	1 in 677	1 in 68,000	1 in 270,000
		Ashkenazi Jewish	99	1 in 60	1 in 5,900	1 in 24,000
		East Asian	99	1 in 292	1 in 29,000	1 in 120,000
		Finnish	99	1 in 1,383	1 in 140,000	1 in 560,000
		Non-Finnish European/Caucasian	99	1 in 284	1 in 28,000	1 in 110,000
		South Asian	98	1 in 529	1 in 26,000	1 in 100,000
		Other (population not assigned)	98	1 in 391	1 in 20,000	1 in 80,000
MPV17	Mitochondrial DNA depletion syndrome, MVP17-related	African/African American	99	1 in 237	1 in 24,000	1 in 96,000
		Latino/Admixed American	98	1 in 3,588	1 in 180,000	1 in 720,000
		Ashkenazi Jewish	99	1 in 1,656	1 in 170,000	1 in 680,000
		East Asian	97	1 in 126	1 in 4,200	1 in 17,000
		Finnish	97	1 in 83	1 in 2,700	1 in 11,000
		Non-Finnish European/Caucasian	99	1 in 636	1 in 64,000	1 in 260,000
		South Asian	99	1 in 542	1 in 54,000	1 in 220,000
		Other (population not assigned)	99	1 in 697	1 in 70,000	1 in 280,000
MTHFD1	Severe combined immunodeficiency (SCID)	African/African American	98	1 in 880	1 in 44,000	1 in 180,000
		Latino/Admixed American	97	1 in 361	1 in 12,000	1 in 48,000
		Ashkenazi Jewish	99	1 in 382	1 in 38,000	1 in 150,000
		East Asian	98	1 in 782	1 in 39,000	1 in 160,000
		Finnish	97	1 in 220	1 in 7,300	1 in 29,000
		Non-Finnish European/Caucasian	97	1 in 201	1 in 6,700	1 in 27,000
		South Asian	97	1 in 693	1 in 23,000	1 in 92,000
		Other (population not assigned)	98	1 in 201	1 in 10,000	1 in 40,000
MTM1	Myotubular myopathy	African/African American	97	N/A	N/A	N/A
		Latino/Admixed American	97	N/A	N/A	N/A
		Ashkenazi Jewish	97	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/Caucasian	99	N/A	N/A	N/A
		South Asian	97	N/A	N/A	N/A
		Other (population not assigned)	97	N/A	N/A	N/A
MTTP	Abetalipoproteinemia	African/African American	99	1 in 181	1 in 18,000	1 in 72,000
		Latino/Admixed American	99	1 in 1,781	1 in 180,000	1 in 720,000
		Ashkenazi Jewish	99	1 in 177	1 in 18,000	1 in 72,000
		East Asian	99	1 in 1,182	1 in 120,000	1 in 480,000
		Finnish	99	1 in 2,157	1 in 220,000	1 in 880,000
		Non-Finnish European/Caucasian	98	1 in 1,581	1 in 79,000	1 in 320,000
		South Asian	97	1 in 804	1 in 27,000	1 in 110,000
		Other (population not assigned)	97	1 in 3,069	1 in 100,000	1 in 400,000
NAGLU	Mucopolysaccharidosis type III	African/African American	99	1 in 316	1 in 32,000	1 in 130,000
		Latino/Admixed American	99	1 in 653	1 in 65,000	1 in 260,000
		Ashkenazi Jewish	97	1 in 137	1 in 4,500	1 in 18,000

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		East Asian	98	1 in 557	1 in 28,000	1 in 110,000
		Finnish	97	1 in 10,822	1 in 360,000	1 in 1,400,000
		Non-Finnish European/Caucasian	99	1 in 361	1 in 36,000	1 in 140,000
		South Asian	99	1 in 529	1 in 53,000	1 in 210,000
		Other (population not assigned)	99	1 in 724	1 in 72,000	1 in 290,000
NBAS	Acute infantile liver failure	African/African American	99	1 in 232	1 in 23,000	1 in 92,000
		Latino/Admixed American	98	1 in 219	1 in 11,000	1 in 44,000
		Ashkenazi Jewish	97	1 in 5,032	1 in 170,000	1 in 680,000
		East Asian	99	1 in 482	1 in 48,000	1 in 190,000
		Finnish	97	1 in 347	1 in 12,000	1 in 48,000
		Non-Finnish European/Caucasian	98	1 in 228	1 in 11,000	1 in 44,000
		South Asian	99	1 in 436	1 in 44,000	1 in 180,000
		Other (population not assigned)	98	1 in 147	1 in 7,300	1 in 29,000
NBN	Nijmegen breakage syndrome	African/African American	99	1 in 379	1 in 38,000	1 in 150,000
		Latino/Admixed American	99	1 in 213	1 in 21,000	1 in 84,000
		Ashkenazi Jewish	99	1 in 255	1 in 25,000	1 in 100,000
		East Asian	99	1 in 278	1 in 28,000	1 in 110,000
		Finnish	99	1 in 103	1 in 10,000	1 in 40,000
		Non-Finnish European/Caucasian	99	1 in 70	1 in 6,900	1 in 28,000
		South Asian	99	1 in 767	1 in 77,000	1 in 310,000
		Other (population not assigned)	99	1 in 124	1 in 12,000	1 in 48,000
NCF2	Chronic granulomatous disease	African/African American	97	1 in 8,129	1 in 270,000	1 in 1,100,000
		Latino/Admixed American	98	1 in 556	1 in 28,000	1 in 110,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	98	1 in 2,262	1 in 110,000	1 in 440,000
		Finnish	99	1 in 5,575	1 in 560,000	1 in 2,200,000
		Non-Finnish European/Caucasian	99	1 in 1,883	1 in 190,000	1 in 760,000
		South Asian	98	1 in 2,189	1 in 110,000	1 in 440,000
		Other (population not assigned)	97	1 in 3,066	1 in 100,000	1 in 400,000
NCF4	Chronic granulomatous disease	African/African American	99	1 in 1,335	1 in 130,000	1 in 520,000
		Latino/Admixed American	99	1 in 8,597	1 in 860,000	1 in 3,400,000
		Ashkenazi Jewish	99	1 in 369	1 in 37,000	1 in 150,000
		East Asian	99	1 in 1,367	1 in 140,000	1 in 560,000
		Finnish	99	1 in 5,385	1 in 540,000	1 in 2,200,000
		Non-Finnish European/Caucasian	99	1 in 540	1 in 54,000	1 in 220,000
		South Asian	99	1 in 450	1 in 45,000	1 in 180,000
		Other (population not assigned)	99	1 in 614	1 in 61,000	1 in 240,000
NDUFAF2	Leigh syndrome, autosomal recessive	African/African American	99	1 in 881	1 in 88,000	1 in 350,000
		Latino/Admixed American	99	1 in 796	1 in 80,000	1 in 320,000
		Ashkenazi Jewish	97	1 in 92	1 in 3,000	1 in 12,000
		East Asian	99	1 in 889	1 in 89,000	1 in 360,000
		Finnish	97	N/A	N/A	N/A
		Non-Finnish European/Caucasian	98	1 in 1,014	1 in 51,000	1 in 200,000

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		South Asian	97	1 in 1,326	1 in 44,000	1 in 180,000
		Other (population not assigned)	98	1 in 331	1 in 17,000	1 in 68,000
NDUFAF5	Leigh syndrome, autosomal recessive	African/African American	98	1 in 1,625	1 in 81,000	1 in 320,000
		Latino/Admixed American	99	1 in 861	1 in 86,000	1 in 340,000
		Ashkenazi Jewish	99	1 in 157	1 in 16,000	1 in 64,000
		East Asian	99	1 in 309	1 in 31,000	1 in 120,000
		Finnish	98	1 in 5,320	1 in 270,000	1 in 1,100,000
		Non-Finnish European/Caucasian	99	1 in 417	1 in 42,000	1 in 170,000
		South Asian	99	1 in 1,180	1 in 120,000	1 in 480,000
		Other (population not assigned)	99	1 in 611	1 in 61,000	1 in 240,000
NDUFS4	Leigh syndrome, autosomal recessive	African/African American	98	1 in 1,207	1 in 60,000	1 in 240,000
		Latino/Admixed American	98	1 in 1,103	1 in 55,000	1 in 220,000
		Ashkenazi Jewish	98	1 in 1,640	1 in 82,000	1 in 330,000
		East Asian	99	1 in 4,597	1 in 460,000	1 in 1,800,000
		Finnish	97	1 in 2,229	1 in 74,000	1 in 300,000
		Non-Finnish European/Caucasian	98	1 in 1,738	1 in 87,000	1 in 350,000
		South Asian	99	1 in 1,914	1 in 190,000	1 in 760,000
		Other (population not assigned)	97	N/A	N/A	N/A
NDUFS6	Leigh syndrome, autosomal recessive	African/African American	99	1 in 2,452	1 in 250,000	1 in 1,000,000
		Latino/Admixed American	98	1 in 1,896	1 in 95,000	1 in 380,000
		Ashkenazi Jewish	98	1 in 1,113	1 in 56,000	1 in 220,000
		East Asian	99	1 in 1,473	1 in 150,000	1 in 600,000
		Finnish	98	N/A	N/A	N/A
		Non-Finnish European/Caucasian	98	1 in 3,599	1 in 180,000	1 in 720,000
		South Asian	98	1 in 1,398	1 in 70,000	1 in 280,000
		Other (population not assigned)	98	N/A	N/A	N/A
NDUFS7	Leigh syndrome, autosomal recessive	African/African American	99	1 in 1,552	1 in 160,000	1 in 640,000
		Latino/Admixed American	99	1 in 2,327	1 in 230,000	1 in 920,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	97	1 in 3,320	1 in 110,000	1 in 440,000
		Finnish	97	1 in 10,639	1 in 350,000	1 in 1,400,000
		Non-Finnish European/Caucasian	99	1 in 839	1 in 84,000	1 in 340,000
		South Asian	99	1 in 180	1 in 18,000	1 in 72,000
		Other (population not assigned)	99	1 in 578	1 in 58,000	1 in 230,000
NDUFV1	Leigh syndrome, autosomal recessive	African/African American	99	1 in 157	1 in 16,000	1 in 64,000
		Latino/Admixed American	99	1 in 441	1 in 44,000	1 in 180,000
		Ashkenazi Jewish	99	1 in 1,680	1 in 170,000	1 in 680,000
		East Asian	98	1 in 2,260	1 in 110,000	1 in 440,000
		Finnish	99	1 in 108	1 in 11,000	1 in 44,000
		Non-Finnish European/Caucasian	99	1 in 469	1 in 47,000	1 in 190,000
		South Asian	99	1 in 319	1 in 32,000	1 in 130,000
		Other (population not assigned)	99	1 in 282	1 in 28,000	1 in 110,000
NEB	Nemaline myopathy	African/African American	93	1 in 190	1 in 2,700	1 in 11,000

Footnotes:

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a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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

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		Latino/Admixed American	98	1 in 149	1 in 7,400	1 in 30,000
		Ashkenazi Jewish	99	1 in 226	1 in 23,000	1 in 92,000
		East Asian	97	1 in 87	1 in 2,900	1 in 12,000
		Finnish	98	1 in 181	1 in 9,000	1 in 36,000
		Non-Finnish European/Caucasian	92	1 in 146	1 in 1,800	1 in 7,200
		South Asian	98	1 in 159	1 in 7,900	1 in 32,000
		Other (population not assigned)	99	1 in 94	1 in 9,300	1 in 37,000
NEU1	Sialidosis	African/African American	99	1 in 636	1 in 64,000	1 in 260,000
		Latino/Admixed American	99	1 in 2,833	1 in 280,000	1 in 1,100,000
		Ashkenazi Jewish	99	1 in 610	1 in 61,000	1 in 240,000
		East Asian	99	1 in 279	1 in 28,000	1 in 110,000
		Finnish	99	1 in 2,745	1 in 270,000	1 in 1,100,000
		Non-Finnish European/Caucasian	99	1 in 1,666	1 in 170,000	1 in 680,000
		South Asian	98	1 in 3,045	1 in 150,000	1 in 600,000
		Other (population not assigned)	99	1 in 1,431	1 in 140,000	1 in 560,000
NGLY1	Congenital disorder of deglycosylation	African/African American	99	1 in 879	1 in 88,000	1 in 350,000
		Latino/Admixed American	98	1 in 1,654	1 in 83,000	1 in 330,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 365	1 in 36,000	1 in 140,000
		Finnish	97	1 in 4,736	1 in 160,000	1 in 640,000
		Non-Finnish European/Caucasian	99	1 in 610	1 in 61,000	1 in 240,000
		South Asian	99	1 in 785	1 in 78,000	1 in 310,000
		Other (population not assigned)	99	1 in 542	1 in 54,000	1 in 220,000
NHEJ1	Severe combined immunodeficiency (SCID)	African/African American	99	1 in 1,016	1 in 100,000	1 in 400,000
		Latino/Admixed American	98	1 in 3,438	1 in 170,000	1 in 680,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 459	1 in 46,000	1 in 180,000
		Finnish	97	1 in 4,474	1 in 150,000	1 in 600,000
		Non-Finnish European/Caucasian	98	1 in 2,750	1 in 140,000	1 in 560,000
		South Asian	99	1 in 1,757	1 in 180,000	1 in 720,000
		Other (population not assigned)	97	1 in 3,071	1 in 100,000	1 in 400,000
NIPAL4	Autosomal recessive congenital ichthyosis (ARCI)	African/African American	99	1 in 1,827	1 in 180,000	1 in 720,000
		Latino/Admixed American	98	1 in 687	1 in 34,000	1 in 140,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	98	1 in 660	1 in 33,000	1 in 130,000
		Finnish	99	1 in 1,759	1 in 180,000	1 in 720,000
		Non-Finnish European/Caucasian	99	1 in 372	1 in 37,000	1 in 150,000
		South Asian	99	1 in 841	1 in 84,000	1 in 340,000
		Other (population not assigned)	99	1 in 657	1 in 66,000	1 in 260,000
NONO	X-linked syndromic mental retardation	African/African American	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

Footnotes:

** includes carriers who are silent carriers (2+0) and carriers with a pathogenic variant not detected in this assay

a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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

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		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	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
NPC1	Niemann-Pick disease type C	African/African American	99	1 in 439	1 in 44,000	1 in 180,000
		Latino/Admixed American	99	1 in 325	1 in 32,000	1 in 130,000
		Ashkenazi Jewish	97	1 in 382	1 in 13,000	1 in 52,000
		East Asian	99	1 in 444	1 in 44,000	1 in 180,000
		Finnish	99	1 in 181	1 in 18,000	1 in 72,000
		Non-Finnish European/Caucasian	99	1 in 150	1 in 15,000	1 in 60,000
		South Asian	99	1 in 548	1 in 55,000	1 in 220,000
		Other (population not assigned)	99	1 in 328	1 in 33,000	1 in 130,000
NPC2	Niemann-Pick disease type C	African/African American	99	1 in 66	1 in 6,500	1 in 26,000
		Latino/Admixed American	99	1 in 306	1 in 31,000	1 in 120,000
		Ashkenazi Jewish	99	1 in 297	1 in 30,000	1 in 120,000
		East Asian	99	1 in 969	1 in 97,000	1 in 390,000
		Finnish	99	1 in 171	1 in 17,000	1 in 68,000
		Non-Finnish European/Caucasian	99	1 in 74	1 in 7,300	1 in 29,000
		South Asian	99	1 in 214	1 in 21,000	1 in 84,000
		Other (population not assigned)	99	1 in 136	1 in 14,000	1 in 56,000
NPHP1	Joubert syndrome and related disorders, including Meckel-Gruber syndrome	African/African American	98	1 in 218	1 in 11,000	1 in 44,000
		Latino/Admixed American	98	1 in 315	1 in 16,000	1 in 64,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	99	1 in 164	1 in 16,000	1 in 64,000
		Finnish	98	1 in 806	1 in 40,000	1 in 160,000
		Non-Finnish European/Caucasian	98	1 in 418	1 in 21,000	1 in 84,000
		South Asian	98	1 in 536	1 in 27,000	1 in 110,000
		Other (population not assigned)	98	1 in 362	1 in 18,000	1 in 72,000
NPHP3	Joubert syndrome and related disorders, including Meckel-Gruber syndrome	African/African American	99	1 in 42	1 in 4,100	1 in 16,000
		Latino/Admixed American	98	1 in 69	1 in 3,400	1 in 14,000
		Ashkenazi Jewish	97	1 in 219	1 in 7,300	1 in 29,000
		East Asian	99	1 in 67	1 in 6,600	1 in 26,000
		Finnish	99	1 in 78	1 in 7,700	1 in 31,000
		Non-Finnish European/Caucasian	99	1 in 73	1 in 7,200	1 in 29,000
		South Asian	97	1 in 57	1 in 1,900	1 in 7,600
		Other (population not assigned)	98	1 in 66	1 in 3,300	1 in 13,000
NPHS1	Nephrotic syndrome	African/African American	99	1 in 42	1 in 4,100	1 in 16,000
		Latino/Admixed American	98	1 in 91	1 in 4,500	1 in 18,000
		Ashkenazi Jewish	99	1 in 419	1 in 42,000	1 in 170,000
		East Asian	99	1 in 121	1 in 12,000	1 in 48,000
		Finnish	98	1 in 27	1 in 1,300	1 in 5,200
		Non-Finnish European/Caucasian	99	1 in 67	1 in 6,600	1 in 26,000
		South Asian	99	1 in 123	1 in 12,000	1 in 48,000

Footnotes:

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		Other (population not assigned)	99	1 in 63	1 in 6,200	1 in 25,000
NPHS2	Nephrotic syndrome	African/African American	98	1 in 370	1 in 18,000	1 in 72,000
		Latino/Admixed American	99	1 in 339	1 in 34,000	1 in 140,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	99	1 in 710	1 in 71,000	1 in 280,000
		Finnish	98	1 in 1,441	1 in 72,000	1 in 290,000
		Non-Finnish European/Caucasian	99	1 in 187	1 in 19,000	1 in 76,000
		South Asian	98	1 in 628	1 in 31,000	1 in 120,000
		Other (population not assigned)	99	1 in 201	1 in 20,000	1 in 80,000
NR0B1	Congenital adrenal hypoplasia, X-linked	African/African American	97	N/A	N/A	N/A
		Latino/Admixed American	97	N/A	N/A	N/A
		Ashkenazi Jewish	97	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/Caucasian	97	N/A	N/A	N/A
		South Asian	97	N/A	N/A	N/A
		Other (population not assigned)	97	N/A	N/A	N/A
NTRK1	Congenital insensitivity to pain with anhidrosis	African/African American	98	1 in 297	1 in 15,000	1 in 60,000
		Latino/Admixed American	99	1 in 322	1 in 32,000	1 in 130,000
		Ashkenazi Jewish	98	1 in 1,827	1 in 91,000	1 in 360,000
		East Asian	98	1 in 181	1 in 9,000	1 in 36,000
		Finnish	99	1 in 233	1 in 23,000	1 in 92,000
		Non-Finnish European/Caucasian	99	1 in 177	1 in 18,000	1 in 72,000
		South Asian	99	1 in 554	1 in 55,000	1 in 220,000
		Other (population not assigned)	99	1 in 198	1 in 20,000	1 in 80,000
OAT	Gyrate atrophy of choroid and retina	African/African American	97	1 in 2,600	1 in 87,000	1 in 350,000
		Latino/Admixed American	99	1 in 892	1 in 89,000	1 in 360,000
		Ashkenazi Jewish	99	1 in 615	1 in 61,000	1 in 240,000
		East Asian	99	1 in 2,935	1 in 290,000	1 in 1,200,000
		Finnish	99	1 in 142	1 in 14,000	1 in 56,000
		Non-Finnish European/Caucasian	99	1 in 426	1 in 43,000	1 in 170,000
		South Asian	99	1 in 904	1 in 90,000	1 in 360,000
		Other (population not assigned)	99	1 in 410	1 in 41,000	1 in 160,000
OBSL1	3M syndrome	African/African American	99	1 in 43	1 in 4,200	1 in 17,000
		Latino/Admixed American	99	1 in 66	1 in 6,500	1 in 26,000
		Ashkenazi Jewish	99	1 in 33	1 in 3,200	1 in 13,000
		East Asian	97	1 in 43	1 in 1,400	1 in 5,600
		Finnish	99	1 in 113	1 in 11,000	1 in 44,000
		Non-Finnish European/Caucasian	99	1 in 103	1 in 10,000	1 in 40,000
		South Asian	97	1 in 187	1 in 6,200	1 in 25,000
		Other (population not assigned)	99	1 in 61	1 in 6,000	1 in 24,000
OCRL	Dent disease	African/African American	99	N/A	N/A	N/A
		Latino/Admixed American	99	N/A	N/A	N/A

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		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/Caucasian	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
OPA3	Costeff optic atrophy syndrome, autosomal recessive	African/African American	97	1 in 6,886	1 in 230,000	1 in 920,000
		Latino/Admixed American	98	1 in 1,889	1 in 94,000	1 in 380,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 3,006	1 in 300,000	1 in 1,200,000
		Finnish	97	N/A	N/A	N/A
		Non-Finnish European/Caucasian	98	1 in 2,572	1 in 130,000	1 in 520,000
		South Asian	99	1 in 391	1 in 39,000	1 in 160,000
		Other (population not assigned)	99	1 in 2,706	1 in 270,000	1 in 1,100,000
OSTM1	Osteopetrosis, autosomal recessive	African/African American	97	N/A	N/A	N/A
		Latino/Admixed American	97	N/A	N/A	N/A
		Ashkenazi Jewish	99	1 in 2,097	1 in 210,000	1 in 840,000
		East Asian	99	1 in 9,197	1 in 920,000	1 in 3,700,000
		Finnish	97	1 in 7,821	1 in 260,000	1 in 1,000,000
		Non-Finnish European/Caucasian	99	1 in 6,173	1 in 620,000	1 in 2,500,000
		South Asian	99	1 in 6,619	1 in 660,000	1 in 2,600,000
		Other (population not assigned)	97	N/A	N/A	N/A
OTC	Ornithine transcarbamylase deficiency	African/African American	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/Caucasian	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
OTOF	Deafness and hearing loss, nonsyndromic	African/African American	99	1 in 201	1 in 20,000	1 in 80,000
		Latino/Admixed American	99	1 in 258	1 in 26,000	1 in 100,000
		Ashkenazi Jewish	99	1 in 78	1 in 7,700	1 in 31,000
		East Asian	99	1 in 52	1 in 5,100	1 in 20,000
		Finnish	99	1 in 903	1 in 90,000	1 in 360,000
		Non-Finnish European/Caucasian	99	1 in 228	1 in 23,000	1 in 92,000
		South Asian	99	1 in 240	1 in 24,000	1 in 96,000
		Other (population not assigned)	99	1 in 229	1 in 23,000	1 in 92,000
P3H1	Osteogenesis imperfecta, autosomal recessive	African/African American	99	1 in 136	1 in 14,000	1 in 56,000
		Latino/Admixed American	97	1 in 278	1 in 9,200	1 in 37,000
		Ashkenazi Jewish	99	1 in 816	1 in 82,000	1 in 330,000
		East Asian	99	1 in 206	1 in 21,000	1 in 84,000
		Finnish	98	1 in 2,203	1 in 110,000	1 in 440,000

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		Non-Finnish European/Caucasian	98	1 in 567	1 in 28,000	1 in 110,000
		South Asian	98	1 in 765	1 in 38,000	1 in 150,000
		Other (population not assigned)	98	1 in 912	1 in 46,000	1 in 180,000
PAH	Phenylalanine hydroxylase deficiency, includes phenylketonuria (PKU)	African/African American	99	1 in 213	1 in 21,000	1 in 84,000
		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	98	1 in 57	1 in 2,800	1 in 11,000
		Finnish	99	1 in 195	1 in 19,000	1 in 76,000
		Non-Finnish European/Caucasian	99	1 in 41	1 in 4,000	1 in 16,000
		South Asian	99	1 in 76	1 in 7,500	1 in 30,000
		Other (population not assigned)	99	1 in 39	1 in 3,800	1 in 15,000
PANK2	Pantothenate kinase-associated neurodegeneration	African/African American	98	1 in 1,027	1 in 51,000	1 in 200,000
		Latino/Admixed American	98	1 in 845	1 in 42,000	1 in 170,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 655	1 in 65,000	1 in 260,000
		Finnish	98	1 in 1,418	1 in 71,000	1 in 280,000
		Non-Finnish European/Caucasian	98	1 in 700	1 in 35,000	1 in 140,000
		South Asian	97	1 in 427	1 in 14,000	1 in 56,000
		Other (population not assigned)	98	1 in 510	1 in 25,000	1 in 100,000
PCBD1	Tetrahydrobiopterin deficiency	African/African American	99	1 in 169	1 in 17,000	1 in 68,000
		Latino/Admixed American	99	1 in 1,306	1 in 130,000	1 in 520,000
		Ashkenazi Jewish	99	1 in 411	1 in 41,000	1 in 160,000
		East Asian	99	1 in 1,314	1 in 130,000	1 in 520,000
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	1 in 984	1 in 98,000	1 in 390,000
		South Asian	99	1 in 7,638	1 in 760,000	1 in 3,000,000
		Other (population not assigned)	99	1 in 745	1 in 74,000	1 in 300,000
PCCA	Propionic acidemia	African/African American	99	1 in 493	1 in 49,000	1 in 200,000
		Latino/Admixed American	98	1 in 348	1 in 17,000	1 in 68,000
		Ashkenazi Jewish	97	1 in 548	1 in 18,000	1 in 72,000
		East Asian	98	1 in 662	1 in 33,000	1 in 130,000
		Finnish	99	1 in 2,722	1 in 270,000	1 in 1,100,000
		Non-Finnish European/Caucasian	99	1 in 756	1 in 76,000	1 in 300,000
		South Asian	99	1 in 522	1 in 52,000	1 in 210,000
		Other (population not assigned)	97	1 in 846	1 in 28,000	1 in 110,000
PCCB	Propionic acidemia	African/African American	98	1 in 238	1 in 12,000	1 in 48,000
		Latino/Admixed American	99	1 in 285	1 in 28,000	1 in 110,000
		Ashkenazi Jewish	97	1 in 4,924	1 in 160,000	1 in 640,000
		East Asian	99	1 in 233	1 in 23,000	1 in 92,000
		Finnish	99	1 in 83	1 in 8,200	1 in 33,000
		Non-Finnish European/Caucasian	99	1 in 144	1 in 14,000	1 in 56,000
		South Asian	99	1 in 842	1 in 84,000	1 in 340,000
		Other (population not assigned)	99	1 in 251	1 in 25,000	1 in 100,000

Footnotes:

** includes carriers who are silent carriers (2+0) and carriers with a pathogenic variant not detected in this assay

a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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

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Gene	Disorder	Ethnicity (Source: https://gnomad.broadinstitute.org/ except CYP21A2 and HBA1/HBA2)	Detection Rate (%) (Derived from gnomAD and ClinVar except CYP21A2, GBA, and HBA1/HBA2)	Individual Carrier Risk Before Testing (Derived from gnomAD and ClinVar except CYP21A2 and HBA1/HBA2)	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
PCDH15	Usher syndrome (hearing loss and retinitis pigmentosa)	African/African American	97	1 in 91	1 in 3,000	1 in 12,000
		Latino/Admixed American	98	1 in 96	1 in 4,800	1 in 19,000
		Ashkenazi Jewish	99	1 in 88	1 in 8,700	1 in 35,000
		East Asian	97	1 in 31	1 in 1,000	1 in 4,000
		Finnish	98	1 in 571	1 in 29,000	1 in 120,000
		Non-Finnish European/Caucasian	98	1 in 114	1 in 5,700	1 in 23,000
		South Asian	97	1 in 59	1 in 1,900	1 in 7,600
		Other (population not assigned)	97	1 in 85	1 in 2,800	1 in 11,000
PDHA1	Pyruvate dehydrogenase deficiency	African/African American	97	N/A	N/A	N/A
		Latino/Admixed American	97	N/A	N/A	N/A
		Ashkenazi Jewish	97	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/Caucasian	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
PDHB	Pyruvate dehydrogenase deficiency	African/African American	99	1 in 8,128	1 in 810,000	1 in 3,200,000
		Latino/Admixed American	97	1 in 1,352	1 in 45,000	1 in 180,000
		Ashkenazi Jewish	97	1 in 5,041	1 in 170,000	1 in 680,000
		East Asian	97	1 in 9,197	1 in 310,000	1 in 1,200,000
		Finnish	98	1 in 3,587	1 in 180,000	1 in 720,000
		Non-Finnish European/Caucasian	98	1 in 6,213	1 in 310,000	1 in 1,200,000
		South Asian	98	1 in 1,797	1 in 90,000	1 in 360,000
		Other (population not assigned)	97	N/A	N/A	N/A
PDHX	Pyruvate dehydrogenase deficiency	African/African American	99	1 in 155	1 in 15,000	1 in 60,000
		Latino/Admixed American	98	1 in 4,294	1 in 210,000	1 in 840,000
		Ashkenazi Jewish	97	1 in 4,921	1 in 160,000	1 in 640,000
		East Asian	99	1 in 461	1 in 46,000	1 in 180,000
		Finnish	98	1 in 2,164	1 in 110,000	1 in 440,000
		Non-Finnish European/Caucasian	99	1 in 1,524	1 in 150,000	1 in 600,000
		South Asian	99	1 in 372	1 in 37,000	1 in 150,000
		Other (population not assigned)	99	1 in 1,242	1 in 120,000	1 in 480,000
PDP1	Pyruvate dehydrogenase deficiency	African/African American	99	1 in 4,064	1 in 410,000	1 in 1,600,000
		Latino/Admixed American	98	1 in 8,647	1 in 430,000	1 in 1,700,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 184	1 in 18,000	1 in 72,000
		Finnish	97	1 in 5,324	1 in 180,000	1 in 720,000
		Non-Finnish European/Caucasian	98	1 in 4,651	1 in 230,000	1 in 920,000
		South Asian	97	1 in 15,296	1 in 510,000	1 in 2,000,000
		Other (population not assigned)	97	N/A	N/A	N/A
PEX1	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	98	1 in 413	1 in 21,000	1 in 84,000
		Latino/Admixed American	99	1 in 441	1 in 44,000	1 in 180,000
		Ashkenazi Jewish	98	1 in 1,201	1 in 60,000	1 in 240,000

Footnotes:

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a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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

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N/A= Not Available

Gene	Disorder	Ethnicity (Source: https://gnomad.broadinstitute.org/ except CYP21A2 and HBA1/HBA2)	Detection Rate (%) (Derived from gnomAD and ClinVar except CYP21A2, GBA, and HBA1/HBA2)	Individual Carrier Risk Before Testing (Derived from gnomAD and ClinVar except CYP21A2 and HBA1/HBA2)	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
		East Asian	99	1 in 336	1 in 34,000	1 in 140,000
		Finnish	97	1 in 2,150	1 in 72,000	1 in 290,000
		Non-Finnish European/Caucasian	98	1 in 212	1 in 11,000	1 in 44,000
		South Asian	99	1 in 513	1 in 51,000	1 in 200,000
		Other (population not assigned)	98	1 in 400	1 in 20,000	1 in 80,000
PEX2	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	97	1 in 2,702	1 in 90,000	1 in 360,000
		Latino/Admixed American	98	1 in 8,645	1 in 430,000	1 in 1,700,000
		Ashkenazi Jewish	99	1 in 198	1 in 20,000	1 in 80,000
		East Asian	99	1 in 2,225	1 in 220,000	1 in 880,000
		Finnish	97	1 in 10,784	1 in 360,000	1 in 1,400,000
		Non-Finnish European/Caucasian	98	1 in 2,002	1 in 100,000	1 in 400,000
		South Asian	98	1 in 1,914	1 in 96,000	1 in 380,000
		Other (population not assigned)	98	1 in 704	1 in 35,000	1 in 140,000
PEX3	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	99	1 in 2,708	1 in 270,000	1 in 1,100,000
		Latino/Admixed American	98	1 in 2,458	1 in 120,000	1 in 480,000
		Ashkenazi Jewish	97	1 in 5,037	1 in 170,000	1 in 680,000
		East Asian	99	1 in 4,599	1 in 460,000	1 in 1,800,000
		Finnish	97	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	1 in 2,968	1 in 300,000	1 in 1,200,000
		South Asian	99	1 in 2,553	1 in 260,000	1 in 1,000,000
		Other (population not assigned)	97	N/A	N/A	N/A
PEX5	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	99	1 in 1,937	1 in 190,000	1 in 760,000
		Latino/Admixed American	98	1 in 2,460	1 in 120,000	1 in 480,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	97	1 in 202	1 in 6,700	1 in 27,000
		Finnish	99	1 in 10,813	1 in 1,100,000	1 in 4,400,000
		Non-Finnish European/Caucasian	99	1 in 914	1 in 91,000	1 in 360,000
		South Asian	97	1 in 1,024	1 in 34,000	1 in 140,000
		Other (population not assigned)	98	1 in 1,532	1 in 77,000	1 in 310,000
PEX6	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	98	1 in 322	1 in 16,000	1 in 64,000
		Latino/Admixed American	99	1 in 262	1 in 26,000	1 in 100,000
		Ashkenazi Jewish	99	1 in 249	1 in 25,000	1 in 100,000
		East Asian	99	1 in 749	1 in 75,000	1 in 300,000
		Finnish	99	1 in 280	1 in 28,000	1 in 110,000
		Non-Finnish European/Caucasian	99	1 in 97	1 in 9,600	1 in 38,000
		South Asian	99	1 in 97	1 in 9,600	1 in 38,000
		Other (population not assigned)	99	1 in 189	1 in 19,000	1 in 76,000
PEX7	Rhizomelic chondrodysplasia punctata	African/African American	99	1 in 261	1 in 26,000	1 in 100,000
		Latino/Admixed American	99	1 in 444	1 in 44,000	1 in 180,000
		Ashkenazi Jewish	99	1 in 118	1 in 12,000	1 in 48,000
		East Asian	98	1 in 272	1 in 14,000	1 in 56,000
		Finnish	98	1 in 443	1 in 22,000	1 in 88,000
		Non-Finnish European/Caucasian	99	1 in 146	1 in 15,000	1 in 60,000

Footnotes:

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

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N/A= Not Available

Gene	Disorder	Ethnicity (Source: https://gnomad.broadinstitute.org/ except CYP21A2 and HBA1/HBA2)	Detection Rate (%) (Derived from gnomAD and ClinVar except CYP21A2, GBA, and HBA1/HBA2)	Individual Carrier Risk Before Testing (Derived from gnomAD and ClinVar except CYP21A2 and HBA1/HBA2)	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
		South Asian	99	1 in 371	1 in 37,000	1 in 150,000
		Other (population not assigned)	98	1 in 183	1 in 9,100	1 in 36,000
PEX10	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	98	1 in 3,744	1 in 190,000	1 in 760,000
		Latino/Admixed American	97	1 in 952	1 in 32,000	1 in 130,000
		Ashkenazi Jewish	99	1 in 518	1 in 52,000	1 in 210,000
		East Asian	98	1 in 2,025	1 in 100,000	1 in 400,000
		Finnish	98	1 in 567	1 in 28,000	1 in 110,000
		Non-Finnish European/Caucasian	98	1 in 766	1 in 38,000	1 in 150,000
		South Asian	98	1 in 917	1 in 46,000	1 in 180,000
		Other (population not assigned)	98	1 in 342	1 in 17,000	1 in 68,000
PEX11B	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	97	1 in 1,799	1 in 60,000	1 in 240,000
		Latino/Admixed American	99	1 in 1,370	1 in 140,000	1 in 560,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 2,991	1 in 300,000	1 in 1,200,000
		Finnish	97	1 in 301	1 in 10,000	1 in 40,000
		Non-Finnish European/Caucasian	97	1 in 1,419	1 in 47,000	1 in 190,000
		South Asian	99	1 in 1,217	1 in 120,000	1 in 480,000
		Other (population not assigned)	98	1 in 1,499	1 in 75,000	1 in 300,000
PEX12	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	98	1 in 552	1 in 28,000	1 in 110,000
		Latino/Admixed American	98	1 in 527	1 in 26,000	1 in 100,000
		Ashkenazi Jewish	99	1 in 1,002	1 in 100,000	1 in 400,000
		East Asian	97	1 in 2,875	1 in 96,000	1 in 380,000
		Finnish	99	1 in 10,825	1 in 1,100,000	1 in 4,400,000
		Non-Finnish European/Caucasian	98	1 in 718	1 in 36,000	1 in 140,000
		South Asian	98	1 in 1,278	1 in 64,000	1 in 260,000
		Other (population not assigned)	99	1 in 3,056	1 in 310,000	1 in 1,200,000
PEX13	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	99	1 in 396	1 in 40,000	1 in 160,000
		Latino/Admixed American	99	1 in 610	1 in 61,000	1 in 240,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	98	1 in 1,815	1 in 91,000	1 in 360,000
		Finnish	98	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	1 in 5,185	1 in 520,000	1 in 2,100,000
		South Asian	99	1 in 522	1 in 52,000	1 in 210,000
		Other (population not assigned)	99	1 in 528	1 in 53,000	1 in 210,000
PEX14	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	99	1 in 7,823	1 in 780,000	1 in 3,100,000
		Latino/Admixed American	99	1 in 16,707	1 in 1,700,000	1 in 6,800,000
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	1 in 3,053	1 in 310,000	1 in 1,200,000
		Finnish	99	1 in 10,699	1 in 1,100,000	1 in 4,400,000
		Non-Finnish European/Caucasian	99	1 in 8,009	1 in 800,000	1 in 3,200,000
		South Asian	99	1 in 1,873	1 in 190,000	1 in 760,000
		Other (population not assigned)	99	N/A	N/A	N/A
PEX16	Zellweger spectrum disorder/ peroxisome	African/African American	97	1 in 2,657	1 in 89,000	1 in 360,000

Footnotes:

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	biogenesis disorder	Latino/Admixed American	97	1 in 3,189	1 in 110,000	1 in 440,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 3,060	1 in 310,000	1 in 1,200,000
		Finnish	99	1 in 4,559	1 in 460,000	1 in 1,800,000
		Non-Finnish European/Caucasian	98	1 in 3,165	1 in 160,000	1 in 640,000
		South Asian	99	1 in 3,061	1 in 310,000	1 in 1,200,000
		Other (population not assigned)	99	1 in 2,744	1 in 270,000	1 in 1,100,000
PEX19	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	97	1 in 8,129	1 in 270,000	1 in 1,100,000
		Latino/Admixed American	99	1 in 3,459	1 in 350,000	1 in 1,400,000
		Ashkenazi Jewish	98	1 in 2,520	1 in 130,000	1 in 520,000
		East Asian	99	1 in 1,840	1 in 180,000	1 in 720,000
		Finnish	97	1 in 1,804	1 in 60,000	1 in 240,000
		Non-Finnish European/Caucasian	98	1 in 1,921	1 in 96,000	1 in 380,000
		South Asian	99	1 in 1,178	1 in 120,000	1 in 480,000
		Other (population not assigned)	97	N/A	N/A	N/A
PEX26	Zellweger spectrum disorder/ peroxisome biogenesis disorder	African/African American	97	1 in 271	1 in 9,000	1 in 36,000
		Latino/Admixed American	98	1 in 691	1 in 35,000	1 in 140,000
		Ashkenazi Jewish	97	1 in 2,520	1 in 84,000	1 in 340,000
		East Asian	99	1 in 263	1 in 26,000	1 in 100,000
		Finnish	97	N/A	N/A	N/A
		Non-Finnish European/Caucasian	98	1 in 996	1 in 50,000	1 in 200,000
		South Asian	99	1 in 1,860	1 in 190,000	1 in 760,000
		Other (population not assigned)	98	1 in 766	1 in 38,000	1 in 150,000
PFKM	Glycogen storage disease type VII	African/African American	99	1 in 62	1 in 6,100	1 in 24,000
		Latino/Admixed American	99	1 in 647	1 in 65,000	1 in 260,000
		Ashkenazi Jewish	98	1 in 108	1 in 5,400	1 in 22,000
		East Asian	99	1 in 488	1 in 49,000	1 in 200,000
		Finnish	97	1 in 773	1 in 26,000	1 in 100,000
		Non-Finnish European/Caucasian	99	1 in 600	1 in 60,000	1 in 240,000
		South Asian	98	1 in 1,165	1 in 58,000	1 in 230,000
		Other (population not assigned)	99	1 in 280	1 in 28,000	1 in 110,000
PGM3	Severe combined immunodeficiency (SCID)	African/African American	99	1 in 690	1 in 69,000	1 in 280,000
		Latino/Admixed American	99	1 in 140	1 in 14,000	1 in 56,000
		Ashkenazi Jewish	98	1 in 960	1 in 48,000	1 in 190,000
		East Asian	99	1 in 1,060	1 in 110,000	1 in 440,000
		Finnish	98	1 in 5,466	1 in 270,000	1 in 1,100,000
		Non-Finnish European/Caucasian	98	1 in 801	1 in 40,000	1 in 160,000
		South Asian	98	1 in 645	1 in 32,000	1 in 130,000
		Other (population not assigned)	98	1 in 338	1 in 17,000	1 in 68,000
PHGDH	Phosphoglycerate dehydrogenase deficiency	African/African American	99	1 in 3,826	1 in 380,000	1 in 1,500,000
		Latino/Admixed American	99	1 in 4,291	1 in 430,000	1 in 1,700,000
		Ashkenazi Jewish	99	1 in 290	1 in 29,000	1 in 120,000
		East Asian	99	1 in 1,500	1 in 150,000	1 in 600,000

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		Finnish	99	1 in 1,859	1 in 190,000	1 in 760,000
		Non-Finnish European/Caucasian	99	1 in 1,575	1 in 160,000	1 in 640,000
		South Asian	99	1 in 1,862	1 in 190,000	1 in 760,000
		Other (population not assigned)	99	N/A	N/A	N/A
PHKA1	Glycogen storage disease type IX	African/African American	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/Caucasian	99	N/A	N/A	N/A
		South Asian	98	N/A	N/A	N/A
		Other (population not assigned)	98	N/A	N/A	N/A
PHKA2	Glycogen storage disease type IX	African/African American	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/Caucasian	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
PHKB	Glycogen storage disease type IX	African/African American	99	1 in 486	1 in 49,000	1 in 200,000
		Latino/Admixed American	99	1 in 456	1 in 46,000	1 in 180,000
		Ashkenazi Jewish	99	1 in 5,040	1 in 500,000	1 in 2,000,000
		East Asian	98	1 in 432	1 in 22,000	1 in 88,000
		Finnish	99	1 in 3,636	1 in 360,000	1 in 1,400,000
		Non-Finnish European/Caucasian	99	1 in 310	1 in 31,000	1 in 120,000
		South Asian	99	1 in 245	1 in 24,000	1 in 96,000
		Other (population not assigned)	99	1 in 435	1 in 43,000	1 in 170,000
PHKG2	Glycogen storage disease type IX	African/African American	97	1 in 176	1 in 5,800	1 in 23,000
		Latino/Admixed American	98	1 in 393	1 in 20,000	1 in 80,000
		Ashkenazi Jewish	97	1 in 2,514	1 in 84,000	1 in 340,000
		East Asian	98	1 in 657	1 in 33,000	1 in 130,000
		Finnish	97	1 in 375	1 in 12,000	1 in 48,000
		Non-Finnish European/Caucasian	98	1 in 476	1 in 24,000	1 in 96,000
		South Asian	98	1 in 657	1 in 33,000	1 in 130,000
		Other (population not assigned)	97	1 in 437	1 in 15,000	1 in 60,000
PKHD1	Polycystic kidney disease, autosomal recessive	African/African American	99	1 in 71	1 in 7,000	1 in 28,000
		Latino/Admixed American	99	1 in 61	1 in 6,000	1 in 24,000
		Ashkenazi Jewish	98	1 in 33	1 in 1,600	1 in 6,400
		East Asian	99	1 in 193	1 in 19,000	1 in 76,000
		Finnish	99	1 in 25	1 in 2,400	1 in 9,600
		Non-Finnish European/Caucasian	99	1 in 31	1 in 3,000	1 in 12,000
		South Asian	99	1 in 127	1 in 13,000	1 in 52,000

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b Luo et al., PMID 23788250

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

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Gene	Disorder	Ethnicity (Source: https://gnomad.broadinstitute.org/ except CYP21A2 and HBA1/HBA2)	Detection Rate (%) (Derived from gnomAD and ClinVar except CYP21A2, GBA, and HBA1/HBA2)	Individual Carrier Risk Before Testing (Derived from gnomAD and ClinVar except CYP21A2 and HBA1/HBA2)	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
		Other (population not assigned)	99	1 in 34	1 in 3,300	1 in 13,000
PLA2G6	Neurodegeneration with brain iron accumulation disorder	African/African American	99	1 in 214	1 in 21,000	1 in 84,000
		Latino/Admixed American	99	1 in 530	1 in 53,000	1 in 210,000
		Ashkenazi Jewish	99	1 in 254	1 in 25,000	1 in 100,000
		East Asian	99	1 in 251	1 in 25,000	1 in 100,000
		Finnish	99	1 in 2,725	1 in 270,000	1 in 1,100,000
		Non-Finnish European/Caucasian	99	1 in 343	1 in 34,000	1 in 140,000
		South Asian	99	1 in 60	1 in 5,900	1 in 24,000
		Other (population not assigned)	99	1 in 242	1 in 24,000	1 in 96,000
PLEKHG5	Distal spinal muscular atrophy, autosomal recessive	African/African American	97	1 in 45	1 in 1,500	1 in 6,000
		Latino/Admixed American	98	1 in 250	1 in 12,000	1 in 48,000
		Ashkenazi Jewish	97	1 in 2,014	1 in 67,000	1 in 270,000
		East Asian	99	1 in 614	1 in 61,000	1 in 240,000
		Finnish	97	1 in 1,252	1 in 42,000	1 in 170,000
		Non-Finnish European/Caucasian	99	1 in 693	1 in 69,000	1 in 280,000
		South Asian	99	1 in 433	1 in 43,000	1 in 170,000
		Other (population not assigned)	97	1 in 168	1 in 5,600	1 in 22,000
PLOD2	Osteogenesis imperfecta, autosomal recessive	African/African American	97	1 in 54	1 in 1,800	1 in 7,200
		Latino/Admixed American	97	1 in 504	1 in 17,000	1 in 68,000
		Ashkenazi Jewish	97	1 in 4,573	1 in 150,000	1 in 600,000
		East Asian	98	1 in 2,150	1 in 110,000	1 in 440,000
		Finnish	99	1 in 251	1 in 25,000	1 in 100,000
		Non-Finnish European/Caucasian	99	1 in 1,400	1 in 140,000	1 in 560,000
		South Asian	98	1 in 842	1 in 42,000	1 in 170,000
		Other (population not assigned)	98	1 in 456	1 in 23,000	1 in 92,000
PMM2	Congenital disorders of glycosylation type 1	African/African American	99	1 in 186	1 in 19,000	1 in 76,000
		Latino/Admixed American	99	1 in 102	1 in 10,000	1 in 40,000
		Ashkenazi Jewish	99	1 in 66	1 in 6,500	1 in 26,000
		East Asian	99	1 in 142	1 in 14,000	1 in 56,000
		Finnish	99	1 in 59	1 in 5,800	1 in 23,000
		Non-Finnish European/Caucasian	99	1 in 59	1 in 5,800	1 in 23,000
		South Asian	99	1 in 246	1 in 25,000	1 in 100,000
		Other (population not assigned)	99	1 in 102	1 in 10,000	1 in 40,000
PNP	Severe combined immunodeficiency (SCID)	African/African American	99	1 in 7,657	1 in 770,000	1 in 3,100,000
		Latino/Admixed American	98	1 in 2,767	1 in 140,000	1 in 560,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 4,312	1 in 430,000	1 in 1,700,000
		Finnish	97	1 in 10,817	1 in 360,000	1 in 1,400,000
		Non-Finnish European/Caucasian	99	1 in 1,145	1 in 110,000	1 in 440,000
		South Asian	98	1 in 918	1 in 46,000	1 in 180,000
		Other (population not assigned)	99	1 in 723	1 in 72,000	1 in 290,000
PNPLA1	Autosomal recessive congenital ichthyosis (ARCI)	African/African American	97	1 in 1,352	1 in 45,000	1 in 180,000
		Latino/Admixed American	99	1 in 1,801	1 in 180,000	1 in 720,000

Footnotes:

** includes carriers who are silent carriers (2+0) and carriers with a pathogenic variant not detected in this assay

a Feng et al., PMID 28125085

b Luo et al., PMID 23788250

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

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		Ashkenazi Jewish	97	1 in 4,365	1 in 150,000	1 in 600,000
		East Asian	99	1 in 511	1 in 51,000	1 in 200,000
		Finnish	99	1 in 10,806	1 in 1,100,000	1 in 4,400,000
		Non-Finnish European/Caucasian	99	1 in 1,456	1 in 150,000	1 in 600,000
		South Asian	97	1 in 3,532	1 in 120,000	1 in 480,000
		Other (population not assigned)	99	1 in 577	1 in 58,000	1 in 230,000
PNPO	Pyridoxal 5'-phosphate-dependent epilepsy	African/African American	98	1 in 386	1 in 19,000	1 in 76,000
		Latino/Admixed American	99	1 in 1,846	1 in 180,000	1 in 720,000
		Ashkenazi Jewish	99	1 in 5,039	1 in 500,000	1 in 2,000,000
		East Asian	97	1 in 1,484	1 in 49,000	1 in 200,000
		Finnish	99	1 in 1,193	1 in 120,000	1 in 480,000
		Non-Finnish European/Caucasian	99	1 in 1,107	1 in 110,000	1 in 440,000
		South Asian	99	1 in 1,920	1 in 190,000	1 in 760,000
		Other (population not assigned)	99	1 in 1,449	1 in 140,000	1 in 560,000
POLH	Xeroderma pigmentosum	African/African American	98	1 in 669	1 in 33,000	1 in 130,000
		Latino/Admixed American	98	1 in 1,003	1 in 50,000	1 in 200,000
		Ashkenazi Jewish	99	1 in 4,915	1 in 490,000	1 in 2,000,000
		East Asian	99	1 in 49	1 in 4,800	1 in 19,000
		Finnish	99	1 in 3,654	1 in 370,000	1 in 1,500,000
		Non-Finnish European/Caucasian	99	1 in 1,002	1 in 100,000	1 in 400,000
		South Asian	99	1 in 393	1 in 39,000	1 in 160,000
		Other (population not assigned)	99	1 in 914	1 in 91,000	1 in 360,000
POMGNT1	Limb-girdle muscular dystrophy, autosomal recessive	African/African American	99	1 in 771	1 in 77,000	1 in 310,000
		Latino/Admixed American	99	1 in 486	1 in 49,000	1 in 200,000
		Ashkenazi Jewish	99	1 in 2,449	1 in 240,000	1 in 960,000
		East Asian	98	1 in 587	1 in 29,000	1 in 120,000
		Finnish	99	1 in 198	1 in 20,000	1 in 80,000
		Non-Finnish European/Caucasian	99	1 in 303	1 in 30,000	1 in 120,000
		South Asian	99	1 in 539	1 in 54,000	1 in 220,000
		Other (population not assigned)	99	1 in 913	1 in 91,000	1 in 360,000
POMT1	Limb-girdle muscular dystrophy, autosomal recessive	African/African American	99	1 in 535	1 in 53,000	1 in 210,000
		Latino/Admixed American	99	1 in 390	1 in 39,000	1 in 160,000
		Ashkenazi Jewish	97	1 in 307	1 in 10,000	1 in 40,000
		East Asian	99	1 in 458	1 in 46,000	1 in 180,000
		Finnish	99	1 in 1,846	1 in 180,000	1 in 720,000
		Non-Finnish European/Caucasian	98	1 in 372	1 in 19,000	1 in 76,000
		South Asian	99	1 in 427	1 in 43,000	1 in 170,000
		Other (population not assigned)	99	1 in 264	1 in 26,000	1 in 100,000
POMT2	Limb-girdle muscular dystrophy, autosomal recessive	African/African American	98	1 in 267	1 in 13,000	1 in 52,000
		Latino/Admixed American	99	1 in 908	1 in 91,000	1 in 360,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	99	1 in 1,274	1 in 130,000	1 in 520,000
		Finnish	98	1 in 3,607	1 in 180,000	1 in 720,000

Footnotes:

** includes carriers who are silent carriers (2+0) and carriers with a pathogenic variant not detected in this assay

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Gene	Disorder	Ethnicity (Source: https://gnomad.broadinstitute.org/ except CYP21A2 and HBA1/HBA2)	Detection Rate (%) (Derived from gnomAD and ClinVar except CYP21A2, GBA, and HBA1/HBA2)	Individual Carrier Risk Before Testing (Derived from gnomAD and ClinVar except CYP21A2 and HBA1/HBA2)	Individual Residual Risk After Negative Result	Risk of Affected Fetus When One Partner has a Carrier Result and One Partner has a Negative Result
		Non-Finnish European/Caucasian	99	1 in 833	1 in 83,000	1 in 330,000
		South Asian	99	1 in 833	1 in 83,000	1 in 330,000
		Other (population not assigned)	97	1 in 1,448	1 in 48,000	1 in 190,000
POR	Congenital adrenal hyperplasia	African/African American	99	1 in 563	1 in 56,000	1 in 220,000
		Latino/Admixed American	98	1 in 278	1 in 14,000	1 in 56,000
		Ashkenazi Jewish	99	1 in 321	1 in 32,000	1 in 130,000
		East Asian	98	1 in 105	1 in 5,200	1 in 21,000
		Finnish	98	1 in 177	1 in 8,800	1 in 35,000
		Non-Finnish European/Caucasian	99	1 in 268	1 in 27,000	1 in 110,000
		South Asian	98	1 in 417	1 in 21,000	1 in 84,000
		Other (population not assigned)	98	1 in 185	1 in 9,200	1 in 37,000
POU3F4	Deafness and hearing loss, nonsyndromic	African/African American	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/Caucasian	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
PPIB	Osteogenesis imperfecta, autosomal recessive	African/African American	97	N/A	N/A	N/A
		Latino/Admixed American	98	1 in 1,722	1 in 86,000	1 in 340,000
		Ashkenazi Jewish	97	1 in 5,041	1 in 170,000	1 in 680,000
		East Asian	99	1 in 2,875	1 in 290,000	1 in 1,200,000
		Finnish	97	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	1 in 2,688	1 in 270,000	1 in 1,100,000
		South Asian	99	1 in 3,061	1 in 310,000	1 in 1,200,000
		Other (population not assigned)	99	1 in 984	1 in 98,000	1 in 390,000
PPT1	Neuronal ceroid-lipofuscinosis	African/African American	99	1 in 856	1 in 86,000	1 in 340,000
		Latino/Admixed American	99	1 in 4,195	1 in 420,000	1 in 1,700,000
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	1 in 8,621	1 in 860,000	1 in 3,400,000
		Finnish	99	1 in 78	1 in 7,700	1 in 31,000
		Non-Finnish European/Caucasian	99	1 in 350	1 in 35,000	1 in 140,000
		South Asian	99	1 in 1,550	1 in 150,000	1 in 600,000
		Other (population not assigned)	99	1 in 228	1 in 23,000	1 in 92,000
PRCD	Retinitis pigmentosa	African/African American	99	1 in 3,673	1 in 370,000	1 in 1,500,000
		Latino/Admixed American	98	1 in 3,989	1 in 200,000	1 in 800,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	99	1 in 2,738	1 in 270,000	1 in 1,100,000
		Finnish	99	1 in 1,276	1 in 130,000	1 in 520,000
		Non-Finnish European/Caucasian	98	1 in 627	1 in 31,000	1 in 120,000
		South Asian	99	1 in 3,359	1 in 340,000	1 in 1,400,000
		Other (population not assigned)	98	N/A	N/A	N/A

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PRDM5	Brittle cornea syndrome	African/African American	98	1 in 1,625	1 in 81,000	1 in 320,000
		Latino/Admixed American	99	1 in 631	1 in 63,000	1 in 250,000
		Ashkenazi Jewish	98	N/A	N/A	N/A
		East Asian	99	1 in 1,078	1 in 110,000	1 in 440,000
		Finnish	98	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	1 in 1,952	1 in 200,000	1 in 800,000
		South Asian	99	1 in 3,061	1 in 310,000	1 in 1,200,000
		Other (population not assigned)	99	1 in 2,111	1 in 210,000	1 in 840,000
PRF1	Familial hemophagocytic lymphohistiocytosis	African/African American	97	1 in 126	1 in 4,200	1 in 17,000
		Latino/Admixed American	99	1 in 429	1 in 43,000	1 in 170,000
		Ashkenazi Jewish	99	1 in 458	1 in 46,000	1 in 180,000
		East Asian	97	1 in 1,099	1 in 37,000	1 in 150,000
		Finnish	97	1 in 10,775	1 in 360,000	1 in 1,400,000
		Non-Finnish European/Caucasian	99	1 in 308	1 in 31,000	1 in 120,000
		South Asian	99	1 in 226	1 in 23,000	1 in 92,000
		Other (population not assigned)	99	1 in 320	1 in 32,000	1 in 130,000
PRKDC	Severe combined immunodeficiency (SCID)	African/African American	98	1 in 545	1 in 27,000	1 in 110,000
		Latino/Admixed American	97	1 in 609	1 in 20,000	1 in 80,000
		Ashkenazi Jewish	97	N/A	N/A	N/A
		East Asian	98	1 in 1,140	1 in 57,000	1 in 230,000
		Finnish	99	1 in 477	1 in 48,000	1 in 190,000
		Non-Finnish European/Caucasian	98	1 in 1,716	1 in 86,000	1 in 340,000
		South Asian	97	1 in 1,165	1 in 39,000	1 in 160,000
		Other (population not assigned)	97	1 in 739	1 in 25,000	1 in 100,000
PSAP	Metachromatic leukodystrophy	African/African American	99	1 in 2,030	1 in 200,000	1 in 800,000
		Latino/Admixed American	99	1 in 884	1 in 88,000	1 in 350,000
		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/Caucasian	99	1 in 2,998	1 in 300,000	1 in 1,200,000
		South Asian	99	1 in 15,385	1 in 1,500,000	1 in 6,000,000
		Other (population not assigned)	99	N/A	N/A	N/A
PTPRC	Severe combined immunodeficiency (SCID)	African/African American	99	1 in 1,304	1 in 130,000	1 in 520,000
		Latino/Admixed American	98	1 in 906	1 in 45,000	1 in 180,000
		Ashkenazi Jewish	99	1 in 2,171	1 in 220,000	1 in 880,000
		East Asian	99	1 in 1,022	1 in 100,000	1 in 400,000
		Finnish	98	1 in 3,606	1 in 180,000	1 in 720,000
		Non-Finnish European/Caucasian	98	1 in 3,195	1 in 160,000	1 in 640,000
		South Asian	97	1 in 1,229	1 in 41,000	1 in 160,000
		Other (population not assigned)	97	1 in 3,044	1 in 100,000	1 in 400,000
PTS	Tetrahydrobiopterin deficiency	African/African American	97	1 in 81	1 in 2,700	1 in 11,000
		Latino/Admixed American	98	1 in 337	1 in 17,000	1 in 68,000
		Ashkenazi Jewish	99	1 in 64	1 in 6,300	1 in 25,000

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		East Asian	99	1 in 152	1 in 15,000	1 in 60,000
		Finnish	99	1 in 470	1 in 47,000	1 in 190,000
		Non-Finnish European/Caucasian	98	1 in 532	1 in 27,000	1 in 110,000
		South Asian	98	1 in 254	1 in 13,000	1 in 52,000
		Other (population not assigned)	99	1 in 251	1 in 25,000	1 in 100,000
PUS1	Mitochondrial myopathy, lactic acidosis, and sideroblastic anemia	African/African American	99	1 in 1,297	1 in 130,000	1 in 520,000
		Latino/Admixed American	98	1 in 1,468	1 in 73,000	1 in 290,000
		Ashkenazi Jewish	97	1 in 1,129	1 in 38,000	1 in 150,000
		East Asian	99	1 in 8,209	1 in 820,000	1 in 3,300,000
		Finnish	98	1 in 1,401	1 in 70,000	1 in 280,000
		Non-Finnish European/Caucasian	98	1 in 1,551	1 in 78,000	1 in 310,000
		South Asian	99	1 in 178	1 in 18,000	1 in 72,000
		Other (population not assigned)	99	1 in 3,063	1 in 310,000	1 in 1,200,000
PYCR1	Cutis laxa	African/African American	99	1 in 459	1 in 46,000	1 in 180,000
		Latino/Admixed American	99	1 in 1,266	1 in 130,000	1 in 520,000
		Ashkenazi Jewish	99	1 in 613	1 in 61,000	1 in 240,000
		East Asian	98	1 in 299	1 in 15,000	1 in 60,000
		Finnish	99	1 in 3,202	1 in 320,000	1 in 1,300,000
		Non-Finnish European/Caucasian	99	1 in 401	1 in 40,000	1 in 160,000
		South Asian	99	1 in 191	1 in 19,000	1 in 76,000
		Other (population not assigned)	99	1 in 590	1 in 59,000	1 in 240,000
PYGM	Glycogen storage disease type V	African/African American	99	1 in 160	1 in 16,000	1 in 64,000
		Latino/Admixed American	99	1 in 48	1 in 4,700	1 in 19,000
		Ashkenazi Jewish	99	1 in 197	1 in 20,000	1 in 80,000
		East Asian	98	1 in 553	1 in 28,000	1 in 110,000
		Finnish	99	1 in 285	1 in 28,000	1 in 110,000
		Non-Finnish European/Caucasian	99	1 in 42	1 in 4,100	1 in 16,000
		South Asian	99	1 in 272	1 in 27,000	1 in 110,000
		Other (population not assigned)	99	1 in 72	1 in 7,100	1 in 28,000
QDPR	Tetrahydrobiopterin deficiency	African/African American	99	1 in 8,124	1 in 810,000	1 in 3,200,000
		Latino/Admixed American	99	1 in 5,766	1 in 580,000	1 in 2,300,000
		Ashkenazi Jewish	99	N/A	N/A	N/A
		East Asian	99	1 in 9,197	1 in 920,000	1 in 3,700,000
		Finnish	99	N/A	N/A	N/A
		Non-Finnish European/Caucasian	99	1 in 2,419	1 in 240,000	1 in 960,000
		South Asian	99	1 in 2,641	1 in 260,000	1 in 1,000,000
		Other (population not assigned)	99	N/A	N/A	N/A

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