

Donor 5325

Genetic Testing Summary

Fairfax Cryobank recommends reviewing this genetic testing summary with your healthcare provider to determine suitability.

Last Updated: 08/14/18

Donor Reported Ancestry: African American, Native American, Italian Jewish Ancestry: No

Genetic Test* Result Comments/Donor's Residual Ris
--

Chromosome analysis (karyotype)	Normal male karyotype	No evidence of clinically significant chromosome abnormalities
Hemoglobin evaluation	Normal hemoglobin fractionation and MCV/MCH results	Reduced risk to be a carrier for sickle cell anemia, beta thalassemia, alpha thalassemia trait (aa/ and a-/a-) and other hemoglobinopathies
Cystic Fibrosis (CF) carrier screening	Negative by genotyping of 130 mutations- in the CFTR gene	1/248
Spinal Muscular Atrophy (SMA) carrier screening	Negative for deletions of exon 7 in the SMN1 gene	1/121
Standard testing attached- 22 diseases by genotyping	Negative for mutations tested	

^{*}No single test can screen for all genetic disorders. A negative screening result significantly reduces, but cannot eliminate, the risk for these conditions in a pregnancy.

^{**}Donor residual risk is the chance the donor is still a carrier after testing negative.





Ordering Practice:

Practice Code:
Fairfax Cryobank Physician:

Report Generated: 2015-11-06

Donor 5325

DOB: Gender: Male

Ethnicity: African, European, and Native

American

Procedure ID: 34264

Kit Barcode:

Method: Genotyping Specimen: Blood, #35734 Specimen Collection: 2015-10-29 Specimen Received: 2015-10-30 Specimen Analyzed: 2015-11-06

25 Partner Not Tested

SUMMARY OF RESULTS

NO MUTATIONS IDENTIFIED

Donor 5325 was not identified to carry any of the mutations tested.

All mutations analyzed were not detected, reducing but not eliminating your chance to be a carrier for the associated genetic diseases. A list of all the diseases and mutations you were screened for is included later in this report. The test does not screen for every possible genetic disease.

For disease information, please visit www.recombine.com/diseases. To speak with a Genetic Counselor, call 855.OUR.GENES.

of Male

Panel: Fairfax Cryobank Panel V2, Diseases Tested: 22, Mutations Tested: 383, Genes Tested: 22, Null Calls: 0

Assay performed by Reprogenetics
CLIA ID: 31 D1054821
Lab Technician Bo Chu

Reviewed by Pere Colls, PhD, HCLD, Lab Director



Methods and Limitations

Genotyping: Genotyping is performed using the Illumina Infinium Custom HD Genotyping assay to identify mutations in >200 genes. The assay is not validated for homozygous mutations, and it is possible that individuals affected with disease may not be accurately genotyped.

Spinal Muscular Atrophy: Spinal Muscular Atrophy is tested for via an Identity-by-State shared haplotype comparison algorithm. Detection is limited to haplotypes within our library of known carriers of the most common mutation (deletion of Exon 7).

Limitations: In some cases, genetic variations other than that which is being assayed may interfere with mutation detection, resulting in false-negative or false-positive results. Additional sources of error include, but are not limited to: sample contamination, sample mixup, bone marrow transplantation, blood transfusions, and technical errors.

The test does not test for all forms of genetic disease, birth defects, and intellectual disability. All results should be interpreted in the context of family history; additional evaluation may be indicated based on a history of these conditions. Additional testing may be necessary to determine mutation phase in individuals identified to carry more than one mutation in the same gene. All mutations included within the genes assayed may not be detected, and additional testing may be appropriate for some individuals.





● High Impact ● Treatment Benefits ● X-Linked ● Moderate Impact

Diseases & Mutations Assayed

H T X M			Mutations
• 0 0 0	Alpha Thalassemia	10	of Genotyping SEA deletion, 11.1kb deletion, c.207C>A (p.N69K), c.223G>C (p.D75G), c.2T>C (p.M1T), c.207C>G (p.N69K), c.340_351delCTCCCCGCCGAG (p.L114_E117del), c.377T>C (p.L126P), c.427T>C (p.X143Qext32), c.*+94A>G
	Beta Thalassemia	83	Ø Genotyping c.17_18delCT, c.20delA (p.E7Gfs), c.217insA (p.S73Kfs), c.223+702_444+342del620insAAGTAGA, c.230delC, c.25_26delAA, c.315+1G>A, c.315+2T>C, c.316-197C>T, c.316-146T>G, c.315+745C>G, c.316-1G>A, c.316-1G>C, c.316-2A>G, c.316-3C>A, c.316-3C>G, c.4delG (p.V2Cfs), c.51delC (p.K18Rfs), c.93-21G>A, c.92+1G>A, c.92+5G>A, c.92+5G>C, c.92+5G>T, c.92+6T>C, c.93-1G>A, c.93-1G>T, c50A>C, c.α-78g, c.α-79g, c.α-81g, c.A52T (p.K18X), c.c-137g, c.c-138t, c.c-151t, c.C118T (p.Q40X), c.G169C (p.G57R), c.G295A (p.V99M), c.G34A (p.V12I), c.G415C (p.A139P), c.G47A (p.W16X), c.G48A (p.W16X), c.t-80α, c.T2C (p.M1T), c.T75A (p.G25G), c.444+111A>G, c.g-29α, c.68_74delAAGTTGG, c.G92C (p.R31T), c.27_28insG, c.92+1G>T, c.92+1G>C, c.93-15T>G, c.93-1G>C, c.112delT, c.G113A (p.W38X), c.G114A (p.W38X), c.126delC, c.444+113A>G, c.250delG, c.225delC, c.383_385delAGG (p.Q128_A129delQAinsP), c.321_322insG (p.N109fs), c.316-1G>T, c.316-2A>C, c.316-106C>T, c.287_288insA (p.197fs), c.271G>T (p.E91X), c.203_204delTG (p.V68Afs), c.154delC (p.P52fs), c.135delC (p.F46fs), c.92+2T>A, c.92+2T>C, c.90C>T (p.G30G), c.59A>G (p.N109), c.46delT (p.W16Gfs), c.45_46insG (p.116fs), c.36delT (p.T13fs), c.2T>G (p.M1R), c.1A>G (p.M1V), c.c-137t, c.c-136g, c.c-142t, c.c-140t
• 0 0 0	Bloom Syndrome	24	Ø Genotyping c.2207_2212delATCTGAinsTAGATTC (p.Y736Lfs), c.2407insT, c.557_559delCAA (p.S186X), c.1284G>A (p.W428X), c.1701G>A (p.W567X), c.1933C>T (p.Q645X), c.C2528T (p.T843I), c.C2695T (p.R899X), c.G3107T (p.C1036F), c.2923delC (p.Q975K), c.3558+1G>T, c.3875-2A>G, c.2074+2T>A, c.2343_2344dupGA (p.781EfsX), c.380delC (p.127Tfs), c.3564delC (p.1188Dfs), c.4008delG (p.1336Rfs), c.C947G (p.S316X), c.2193+1_2193+9del9, c.C1642T (p.Q548X), c.3143delA (p.1048NfsX), c.356_357delTA (p.Cys120Hisfs), c.4076+1delG, c.C3281A (p.S1094X)
•000	Canavan Disease	8	of Genotyping c.433-2A>G, c.A854C (p.E285A), c.C693A (p.Y231X), c.C914A (p.A305E), c.A71G (p.E24G), c.C654A (p.C218X), c.T2C (p.M1T), c.G79A (p.G27R)



нтхм			Mutations
	Cystic Fibrosis	130	σ' Genotyping c.1029delC, 1153_1154insAT, c.1519_1521delATC (p.507dell), c.1521_1523delCTT (p.508delF), c.1545_1546delTA (p.Y515Xfs), c.1585-1G>A, c.164+12T>C, c.1680-886A>G, c.1680-1G>A, c.1766+1G>A, c.1766+1G>T, c.1766+5G>T, c.1818del84, c.1911delG, c.1923delCTCAAAACTinsA, c.1973delGAAATCAATCCTinsAGAAA, c.2052delA (p.K684fs), c.2052insA (p.Q685fs), c.2051_2052delAAinsG (p.K6845fsX38), c.2174insA, c.261delTT, c.2657+5G>A, c.273+1G>A, c.273+1G>A, c.273+3A>C, c.274+1G>A, c.2988+1G>A, c.3039delC, c.3140-26A>G, c.325delTATinsG, c.3527delC, c.3535delACCA, c.3691delT, c.3717+12191C>T, c.3744delA, c.3773_3774insT (p.11258fs), c.442delA, c.489+1G>T, c.531delT, c.579+1G>T, c.579+5G>A (IVS4+5G>A), c.803delA (p.N268fs), c.805_806delAT (p.1269fs), c.933_935delCTT (p.311delF), c.A1645C (p.S549R), c.A2128T (p.K710X), c.C1000T (p.R334W), c.C1013T (p.T338l), c.C1364A (p.A455E), c.C1477T (p.Q493X), c.C1572A (p.C524X), c.C1657T (p.R555X), c.C1657T (p.R555X), c.C721A (p.P574H), c.C2125T (p.R709X), c.C3472T (p.R1158X), c.C3484T (p.R1162X), c.C349T (p.R117C), c.C3587G (p.S1196X), c.C3472T (p.R1158X), c.C344AT (p.R1162X), c.C349T (p.R117C), c.G3587G (p.S1196X), c.C3472T (p.G1238X), c.G3764A (p.S1255X), c.G390G (p.N1303K), c.G1040A (p.R347H), c.G1040C (p.R347P), c.G1438T (p.E60X), c.G3164A (p.G522D), c.G254A (p.G85E), c.G271A (p.G91R), c.G343P), c.G1438T (p.E60X), c.G31665A (p.G522D), c.G254A (p.G85E), c.G271A (p.G91R), c.G330A (p.R117H), c.G3601A (p.W1204X), c.G3752A (p.S151N), c.G330A (p.R117H), c.G3601A (p.W1204X), c.G3752A (p.S151N), c.G330A (p.R117H), c.G3611A (p.W1204X), c.G3752A (p.S151N), c.G330A (p.R117H), c.G350A (p.R107G), c.G326C (p.D110H), c.S031GP (p.S549R), c.1976delA (p.N1578), c.G328C (p.D110H), c.S80-1G>T, c.G1055A (p.R352Q), c.C1075A (p.G352A (p.G178R), c.G988T (p.G3330X), c.T1090C (p.S364P), c.T3302A (p.R1176), c.G361A (p.N1204X), c.G3752A (p.G1260K), c.C147 (p.F91), c.G1055A (p.R352Q), c.C1075A (p.G350A (p.R1179fs), c.G360C (p.R1120fs), c.G328C (p.D110H), c.S80-1G>T, c.G1055A (p.R352Q), c.C1075A (p.G358K), c.
000	Familial Dysautonomia	4	o ⁷ Genotyping c.2204+6T>C, c.C2741T (p.P914L), c.G2087C (p.R696P), c.C2128T (p.Q710X)
• 0 0 0	Familial Hyperinsulinism: Type 1: ABCC8 Related	10	of Genotyping c.3989-9G>A, c.4159_4161delTTC (p.1387delF), c.C4258T (p.R1420C), c.C4477T (p.R1493W), c.G2147T (p.G716V), c.G4055C (p.R1352P), c.T560A (p.V187D), c.4516G>A (p.E1506K), c.C2506T (p.Q836X), c.579+2T>A
	Fanconi Anemia: Type C	8	of Genotyping c.456+4A>T, c.67delG, c.C37T (p.Q13X), c.C553T (p.R185X), c.T1661C (p.L554P), c.C1642T (p.R548X), c.G66A (p.W22X), c.G65A (p.W22X)
	Gaucher Disease	6	of Genotyping c.84_85insG, c.A1226G (p.N409S), c.A1343T (p.D448V), c.C1504T (p.R502C), c.G1297T (p.V433L), c.G1604A (p.R535H)
	Glycogen Storage Disease: Type IA	13	of Genotyping c.376_377insTA, c.79delC, c.979_981delTTC (p.327delF), c.C1039T (p.Q347X), c.C247T (p.R83C), c.C724T (p.Q242X), c.G248A (p.R83H), c.G562C (p.G188R), c.G648T, c.G809T (p.G270V), c.A113T (p.D38V), c.975delG (p.L326fs), c.724delC
•000	Joubert Syndrome	1	od Genotyping c.G35T (p.R12L)
	Maple Syrup Urine Disease: Type 1B	6	of Genotyping c.G1114T (p.E372X), c.G548C (p.R183P), c.G832A (p.G278S), c.C970T (p.R324X), c.G487T (p.E163X), c.C853T (p.R285X)



нтхм			Mutations
••00	Maple Syrup Urine Disease: Type 3	8	of Genotyping c.104_105insA, c.G685T (p.G229C), c.A214G (p.K72E), c.A1081G (p.M361V), c.G1123A (p.E375K), c.T1178C (p.1393T), c.C1463T (p.P488L), c.A1483G (p.R495G)
• 0 0 0	Mucolipidosis: Type IV	4	o Genotyping c.406-2A>G, c.G1084T (p.D362Y), c.C304T (p.R102X), c.244delC (p.L82fsX)
•000	Nemaline Myopathy: NEB Related	1	of Genotyping c.7434_7536del2502bp
• 0 0 0	Niemann-Pick Disease: Type A	6	of Genotyping c.996delC, c.G1493T (p.R498L), c.T911C (p.L304P), c.C1267T (p.H423Y), c.G1734C (p.K578N), c.1493G>A (p.R498H)
	Sickle-Cell Anemia	1	o Genotyping c.A20T (p.E7V)
• 0 0 0	Spinal Muscular Atrophy: SMN1 Linked	19	Genotyping DEL EXON 7, c.22_23insA, c.43C>T (p.Q15X), c.91_92insT, c.305G>A (p.W102X), c.400G>A (p.E134K), c.439_443delGAAGT, c.558delA, c.585_586insT, c.683T>A (p.L228X), c.734C>T (p.P245L), c.768_778dupTGCTGATGCTT, c.815A>G (p.Y272C), c.821C>T (p.T274I), c.823G>A (p.G275S), c.834+2T>G, c.835-18_835-12delCCTTTAT, c.835G>T, c.836G>T
• 0 0 0	Tay-Sachs Disease	30	of Genotyping c.1073+1G>A, c.1277_1278insTATC, c.1421+1G>C, c.805+1G>A, c.C532T (p.R178C), c.G533A (p.R178H), c.G805A (p.G269S), c.C1510T (p.R504C), c.G1496A (p.R499H), c.G509A (p.R170Q), c.A1003T (p.1335F), c.910_912delTTC (p.305delF), c.G749A (p.G250D), c.T632C (p.F211S), c.C629T (p.S210F), c.613delC, c.A611G (p.H204R), c.G598A (p.V200M), c.A590C (p.K197T), c.571-1G>T, c.C540G (p.Y180X), c.T538C (p.Y180H), c.G533T (p.R178L), c.C508T (p.R170W), c.C409T (p.R137X), c.T380G (p.L127R), c.346+1G>C, c.T116G (p.L39R), c.G78A (p.W26X), c.A1G (p.M1V)
•000	Usher Syndrome: Type 1F	6	of Genotyping c.C733T (p.R245X), c.2067C>A (p.Y684X), c.C7T (p.R3X), c.C1942T (p.R648X), c.2800C>T (p.R934X), c.4272delA (p.L1425fs)
•000	Usher Syndrome: Type 3	4	♂ Genotyping c.T144G (p.N48K), c.T359A (p.M120K), c.300T>G (p.Y176X), c.C634T (p.Q212X)
•000	Walker-Warburg Syndrome	1	♂ Genotyping c.1167insA (p.F390fs)