

## Genetic Panel 1.2

---

**Bloom Syndrome - Gene: BLM.** Variants (1): 2281del6ins7.

**Canavan Disease - Gene: ASPA.** Variants (4): E285A, Y231X, A305E, IVS2-2A>G.

**Cystic Fibrosis - Gene: CFTR.** Variants (99): G85E, R117H, R334W, R347P, A455E, G542X, G551D, R553X, R560T, R1162X, W1282X, N1303K, F508del, I507del, 2184delA, 3659delC, 621+1G>T, 711+1G>T, 1717-1G>A, 1898+1G>A, 2789+5G>A, 3120+1G>A, 3849+10kbC>T, E60X, R75X, E92X, Y122X, G178R, R347H, Q493X, V520F, S549N, P574H, M1101K, D1152H, 2143delT, 394delTT, 444delA, 1078delT, 3876delA, 3905insT, 1812-1G>A, 3272-26A>G, 2183AA>G, S549R(A>C), R117C, L206W, G330X, T338I, R352Q, S364P, G480C, C524X, S549R(T>G), Q552X, A559T, G622D, R709X, K710X, R764X, Q890X, R1066C, W1089X, Y1092X, R1158X, S1196X, W1204X(c.3611G>A), Q1238X, S1251N, S1255X, 3199del6, 574delA, 663delT, 935delA, 936delTA, 1677delTA, 1949del84, 2043delG, 2055del9>A, 2108delA, 3171delC, 3667del4, 3791delC, 1288insTA, 2184insA, 2307insA, 2869insG, 296+12T>C, 405+1G>A, 405+3A>C, 406-1G>A, 711+5G>A, 712-1G>T, 1898+1G>T, 1898+5G>T, 3120G>A, 457TAT>G, 3849+4A>G, Q359K/T360K.

**Familial Dysautonomia - Gene: IKBKAP.** Variants (2): IVS20+6T>C, R696P.

**Fanconi Anemia Type C - Gene: FANCC.** Variants (3): IVS4+4A>T, 322delG, R548X.

**Gaucher Disease - Gene: GBA.** Variants (10): N370S, L444P, 84GG, IVS2+1G>A, V394L, R496H, D409H, D409V, R463C, R463H.

**Hb Beta Chain-Related Hemoglobinopathy (Including Beta Thalassemia and Sickle Cell Disease)**  
- Gene: HBB. Variants (28): Hb S, K17X, Q39X, Phe41fs, Ser9fs, IVSII-654, IVS-II-745, IVS-II-850, IVS-I-6, IVS-I-110, IVS-I-5, IVS-I-1(G>A), -88C>T, -28A>G, -29A>G, Lys8fs, Phe71fs, IVS-II-849(A>C), IVS-II-849(A>G), Gly24 T>A, -87C>G, Hb C, W15X, Gly16fs, Glu6fs, Hb E, Hb D-Punjab, Hb O-Arab.

**Hexosaminidase A Deficiency (Including Tay-Sachs Disease) - Gene: HEXA.** Variants (9): 1278insTATC, IVS12+1G>C, G269S, IVS9+1G>A, R178H, IVS7+1G>A, 7.6kb del, G250D, R170W.

**Mucolipidosis IV - Gene: MCOLN1.** Variants (2): 511\_6944del, IVS3-2A>G.

**Niemann-Pick Disease, SMPD1-Associated - Gene: SMPD1.** Variants (4): fsP330, L302P, R496L, p.R608del.

**Spinal Muscular Atrophy - Gene: SMN1.** Variants (1): SMN1 copy number.

**Beta Thalassemia - Gene: HBB.** Variants (27): K17X, Q39X, Phe41fs, Ser9fs, IVS-II-654, IVS-II-745, IVS-II-850, IVS-I-6, IVS-I-110, IVS-I-5, IVS-I-1(G>A), -88C>T, -28A>G, -29A>G, Lys8fs, Phe71fs, IVS-II-849(A>C), IVS-II-849(A>G), Gly24 T>A, -87C>G, Hb C, W15X, Gly16fs, Glu6fs, Hb E, Hb D-Punjab, Hb O-Arab.