

Targeted Genes and Methodology Details for Comprehensive Cerebrovascular Gene Panel

The following applies to CVHBG / Comprehensive Cerebrovascular Gene Panel. Testing is performed to evaluate for the presence of variants in coding regions and extending to +/- 10 base pairs of adjacent intronic sequence on either side of the coding exons of the genes analyzed. In addition, the analysis will cover select non-coding variants. Next-generation sequencing and/or a polymerase chain reaction-based quantitative method is performed to test for the presence of copy number variants (CNV) in the genes analyzed. Confirmation of select reportable variants may be performed by alternate methodologies based on internal laboratory criteria.

This list is current from November 2022 to the present. This document is intended to highlight additional evaluations for variants of high clinical interest as well as technical limitations. However, this document does not comprehensively reflect all genomic regions covered by this test. For questions regarding transcripts, genes or regions covered, contact the laboratory at 800-533-1710.

Genomic Build: GRCh37 (hg19) unless otherwise specified

Gene	Reference Transcript	Additional Evaluations	Technical Limitations
ACTA2	NM_001613.4	-	-
ACVRL1	NM_000020.3	-	-
ADA2	NM_001282225.2	-	-
CBS	NM_000071.2	-	-
CCM2	NM_031443.3	-	-
COL3A1	NM_000090.3	-	-
COL4A1	NM_001845.6	-	-
COL4A2	NM_001846.4	-	-
CST3	NM_000099.4	-	-
ENG	NM_001114753.2	chr9:g.130616761G>A (c127C>T); chr9:g.130578359A>G (c.1742-22T>C)	-
ЕРНВ4	NM_004444.5	-	-
GDF2	NM_016204.4	-	-
GLA	NM_000169.2	chrX:g.100654735C>T (c.640-801G>A); chrX:g.100653945A>T (c.640-11T>A)	-
GUCY1A1	NM_000856.6	-	CNV may not be detected in exon 6
HTRA1	NM_002775.5	-	-
KRIT1	NM_194456.1	chr7:g.91856011A>T (c.990-15T>A); chr7:g.91855154G>C (c.1147-13C>G); chr7:g.91830749T>C (c.2026-12A>G)	-
<i>NOTCH3</i>	NM_000435.3	-	-
PDCD10	NM_145860.1	-	-
RASA1	NM_002890.3	-	-
RNF213	NM_001256071.3	-	-
SLC2A10	NM_030777.4	-	-
SMAD2	NM_005901.6	chr18:g.45396947T>C (c.237-12A>G)	-
SMAD3	NM_005902.4	-	-
SMAD4	NM_005359.6	-	-
TEK	NM_000459.4	-	-
TGFB2	NM_003238.6	-	-
TGFB3	NM_003239.4	-	-
TGFBR1	NM_004612.4	-	-
TGFBR2	NM_003242.6	-	-
TREX1	NM_033629.6	-	-

Effective Date	Version	Synopsis of Test Change
6/4/2025	V2	Added Additional Evaluations for ENG, GLA, KRIT1, and SMAD2.