MAYO CLINIC LABORATORIES | Targeted Genes and Methodology Details for SDH Genes Mutation Analysis

The following applies to SDHMP / *SDH* Genes Mutation Analysis, Next-Generation Sequencing. Next-generation sequencing (NGS) is performed to test for the presence of single nucleotide variations, deletions, and insertions in coding regions and intron/exon boundaries of the genes listed. When appropriate, alterations detected are confirmed by an independent reference method, such as Sanger sequencing. Default reportable range offset is +/-2 base pairs around each targeted exon region.

Genomic Build: GRCh37 (hg19) unless otherwise specified

As a result of technical limitations of the assay (including regions of homology, high GC content, and repetitive sequences), there are regions of some genes that cannot be effectively evaluated. Refer to gene regions table below for complete gene coverage information. To verify if a specific region/exon/variant is covered by this assay, contact the laboratory at 800-533-1710.

Gene	Exon	Chromosome	Genomic Start	Genomic Stop	Reference Transcript
SDHA	Ex1	chr5	218469	218535	NM_004168
SDHA	Ex2	chr5	223595	223685	NM_004168
SDHA	Ex3	chr5	224473	224638	NM_004168
SDHA	Ex4	chr5	225532	225679	NM_004168
SDHA	Ex5	chr5	225996	226164	NM_004168
SDHA	Ex6	chr5	228298	228450	NM_004168
SDHA	Ex7	chr5	230989	231117	NM_004168
SDHA	Ex8	chr5	233590	233762	NM_004168
SDHA	Ex9	chr5	235257	235456	NM_004168
SDHA	Ex11	chr5	240471	240593	NM_004168
SDHA	Ex12	chr5	251105	251220	NM_004168
SDHB	Ex1	chr1	17380441	17380516	NM_003000
SDHB	Ex2	chr1	17371254	17371385	NM_003000
SDHB	Ex3	chr1	17359553	17359642	NM_003000
SDHB	Ex4	chr1	17355093	17355233	NM_003000
SDHB	Ex5	chr1	17354242	17354362	NM_003000
SDHB	Ex6	chr1	17350466	17350571	NM_003000
SDHB	Ex7	chr1	17349101	17349227	NM_003000
SDHB	Ex8	chr1	17345374	17345455	NM_003000
SDHC	Ex1	chr1	161284194	161284217	NM_003001
SDHC	Ex2	chr1	161293402	161293462	NM_003001
SDHC	Ex3	chr1	161298184	161298289	NM_003001
SDHC	Ex4	chr1	161310382	161310447	NM_003001
SDHC	Ex5	chr1	161326465	161326632	NM_003001
SDHD	Ex1	chr11	111957630	111957685	NM_003002
SDHD	Ex2	chr11	111958579	111958699	NM_003002
SDHD	Ex3	chr11	111959589	111959737	NM_003002
SDHD	Ex4	chr11	111965527	111965696	NM_003002