MAYO CLINIC LABORATORIES

Targeted Genes and Methodology Details for IDH1/IDH2 Mutation Analysis

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
IDH1	Ex3	chr2	209116152	209116277	NM_005896
IDH1	Ex4	chr2	209113091	209113386	NM_005896
IDH1	Ex5	chr2	209110041	209110150	NM_005896
IDH1	Ex6	chr2	209108149	209108330	NM_005896
IDH1	Ex7	chr2	209106716	209106871	NM_005896
IDH1	Ex8	chr2	209104585	209104729	NM_005896
IDH1	Ex9	chr2	209103793	209103959	NM_005896
IDH1	Ex10	chr2	209101801	209101895	NM_005896
IDH2	Ex1	chr15	90645506	90645624	NM_002168
IDH2	Ex2	chr15	90634783	90634878	NM_002168
IDH2	Ex3	chr15	90633709	90633878	NM_002168
IDH2	Ex4	chr15	90631817	90631981	NM_002168
IDH2	Ex5	chr15	90631589	90631736	NM_002168
IDH2	Ex6	chr15	90630669	90630809	NM_002168
IDH2	Ex7	chr15	90630342	90630497	NM_002168
IDH2	Ex8	chr15	90628505	90628621	NM_002168
IDH2	Ex9	chr15	90628231	90628332	NM_002168
IDH2	Ex10	chr15	90628046	90628142	NM_002168
IDH2	Ex11	chr15	90627496	90627587	NM_002168