

Targeted Genes and Methodology Details for ALK Mutation Analysis

The following applies to ALKT / ALK Mutation Analysis, Next-Generation Sequencing. Next-generation sequencing 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.

As a result of technical limitations of the assay (including regions of homology, high guanine-cytosine [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.

Genomic Build: GRCh37 (hg19) unless otherwise specified.

Gene	Exon	Chromosome	Genomic Start	Genomic End	Transcript
ALK	Ex1	chr2	30142857	30143527	NM_004304
ALK	Ex2	chr2	29940442	29940565	NM_004304
ALK	Ex3	chr2	29917714	29917882	NM_004304
ALK	Ex4	chr2	29754779	29754984	NM_004304
ALK	Ex5	chr2	29606596	29606727	NM_004304
ALK	Ex6	chr2	29551214	29551349	NM_004304
ALK	Ex7	chr2	29543615	29543750	NM_004304
ALK	Ex8	chr2	29541168	29541272	NM_004304
ALK	Ex9	chr2	29519752	29519925	NM_004304
ALK	Ex10	chr2	29498266	29498364	NM_004304
ALK	Ex11	chr2	29497963	29498095	NM_004304
ALK	Ex12	chr2	29473969	29474135	NM_004304
ALK	Ex13	chr2	29462544	29462698	NM_004304
ALK	Ex14	chr2	29456429	29456564	NM_004304
ALK	Ex15	chr2	29455168	29455316	NM_004304
ALK	Ex16	chr2	29451748	29451934	NM_004304
ALK	Ex17	chr2	29450438	29450540	NM_004304
ALK	Ex18	chr2	29449786	29449942	NM_004304
ALK	Ex19	chr2	29448325	29448433	NM_004304
ALK	Ex20	chr2	29446206	29446396	NM_004304
ALK	Ex21	chr2	29445381	29445475	NM_004304
ALK	Ex22	chr2	29445208	29445276	NM_004304
ALK	Ex23	chr2	29443570	29443703	NM_004304
ALK	Ex24	chr2	29436848	29436949	NM_004304
ALK	Ex25	chr2	29432650	29432746	NM_004304
ALK	Ex26	chr2	29430035	29430140	NM_004304
ALK	Ex27	chr2	29420406	29420544	NM_004304
ALK	Ex28	chr2	29419634	29419728	NM_004304
ALK	Ex29	chr2	29416088	29416790	NM_004304