

## **Targeted Genes and Methodology Details for Histone Genes Mutation Analysis**

This following applies to HISGT / Histone Genes 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 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 Stop	Reference Transcript
H3-3A	Ex2	chr1	226252051	226252182	NM_002107
H3-3A	Ex3	chr1	226253355	226253512	NM_002107
Н3-3В	Ex2	chr17	73775126	73775257	NM_005324
Н3-3В	Ex3	chr17	73774889	73775046	NM_005324
Н3-3В	Ex4	chr17	73774674	73774806	NM_005324
Н3С2	Ex1	chr6	26031876	26032290	NM_003537
Н3С3	Ex1	chr6	26045637	26046051	NM_003531
HIST2H3C	Ex1	chr1	149812317	149812731	NM_021059