

Phospho-Histone H3-S10 Antibody Blocking Peptide Synthetic peptide Catalog # BP1151b

Specification

Phospho-Histone H3-S10 Antibody Blocking Peptide - Product Information

Primary Accession

<u>P84243</u>

Phospho-Histone H3-S10 Antibody Blocking Peptide - Additional Information

Gene ID 3020;3021

Other Names Histone H33, H3F3A, H33A, H3F3

Target/Specificity

The synthetic peptide sequence used to generate the antibody <a >AM1151b was selected from the region of human Phospho-Histone H3-S10. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-Histone H3-S10 Antibody Blocking Peptide - Protein Information

Name H3-3A (<u>HGNC:4764</u>)

Synonyms H3.3A, H3F3, H3F3A

Function

Variant histone H3 which replaces conventional H3 in a wide range of nucleosomes in active genes. Constitutes the predominant form of histone H3 in non-dividing cells and is incorporated into chromatin independently of DNA synthesis. Deposited at sites of nucleosomal displacement throughout transcribed genes, suggesting that it represents an epigenetic imprint of transcriptionally active chromatin. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

Cellular Location



Nucleus. Chromosome

Phospho-Histone H3-S10 Antibody Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

Phospho-Histone H3-S10 Antibody Blocking Peptide - Images

Phospho-Histone H3-S10 Antibody Blocking Peptide - Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Nucleosomes consist of approximately 146 bp of DNA wrapped around a histone octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a member of the histone H3 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is located separately from the other H3 genes that are in the histone gene cluster on chromosome 6p22-p21.3.

Phospho-Histone H3-S10 Antibody Blocking Peptide - References

Marzluff, W.F., et al., Genomics 80(5):487-498 (2002).Albig, W., et al., Hum. Genet. 101(3):284-294 (1997).Albig, W., et al., Hum. Genet. 97(4):486-491 (1996).