

Phospho-H3(S10) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3667a**Specification**

Phospho-H3(S10) Antibody Blocking peptide - Product InformationPrimary Accession [P84243](#)**Phospho-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 [AP3667a](/products/AP3667a) was selected from the region of human Phospho-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-H3(S10) Antibody Blocking peptide - Protein Information**Name** H3-3A ([HGNC:4764](#))**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-H3(S10) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-H3(S10) Antibody Blocking peptide - Images**Phospho-H3(S10) Antibody Blocking peptide - Background**

H3 is basic nuclear protein that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures.

Phospho-H3(S10) Antibody Blocking peptide - References

Teng, H., et.al., J. Biol. Chem. 284 (39), 26368-26376 (2009) Garcia, B.A., et.al., J. Biol. Chem. 282 (10), 7641-7655 (2007)