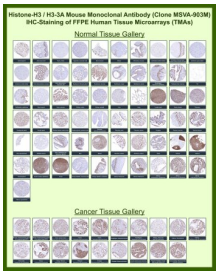
Phospho-Histone H3 (pSer10) Antibody for IHC / HIST1H3A Immunohistochemistry Antibody [clone MSVA-903M] (V6135)

Catalog No.	Formulation	Size
V6135-100UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6135-20UG	Antibody in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug

Recombinant | MOUSE MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG2b, kappa
Clone Name	MSVA-903M
UniProt	P68431
Localization	Chromosome, Nucleus
Applications	Immunohistochemistry (FFPE) : 1:100-1:200
Limitations	This Phospho-Histone H3 (pSer10) Antibody for IHC is available for research use only.



Phospho-Histone H3 Ser10 Antibody for IHC Tissue Microarray (TMA). Immunohistochemistry analysis of phosphorylated Histone H3 Ser10 / HIST1H3A in formalin-fixed paraffin-embedded human normal and cancer tissue microarrays using recombinant mouse monoclonal phospho-Histone H3 antibody clone MSVA-903M. Tissue microarray (TMA) staining with HRP-DAB brown chromogen demonstrates strong nuclear localization in mitotically active cells with condensed chromatin, while non-dividing cells remain largely negative, consistent with phase-specific labeling of mitosis. Within tumor tissue microarrays, increased numbers of positive nuclei are observed in proliferative regions, reflecting elevated mitotic activity. Evaluation across large TMA panels enables direct comparison of mitotic index across diverse tissue types under standardized conditions. The observed staining patterns align with known proliferation zones and reported HIST1H3A phosphorylation profiles in publicly available datasets including the Human Protein Atlas.

Description

Histone H3 (HIST1H3A) is a nucleosomal protein that undergoes phosphorylation at serine 10 during mitosis, marking

cells actively undergoing chromatin condensation. Phospho-Histone H3 (pSer10) Antibody for IHC / HIST1H3A Immunohistochemistry Antibody (clone MSVA-903M) is specifically positioned for detection of this modification in formalin-fixed, paraffin-embedded tissue sections and large-scale tissue microarray studies. This antibody is part of a broader collection of Histone H3 antibodies used to study chromatin structure, histone modifications, and epigenetic regulation.

HIST1H3A antibody, also referred to as Histone H3 antibody and phospho-H3 Ser10 antibody in the literature, identifies a nuclear phosphorylation event restricted to mitotic cells. In FFPE tissues, this produces strong, sharply defined nuclear staining in mitotic figures, while surrounding non-dividing cells remain largely negative, enabling clear morphological interpretation.

This Phospho-Histone H3 (pSer10) Antibody for IHC is uniquely positioned for tissue-based proliferation assessment, with a strong emphasis on histological context rather than biochemical response. In human tissue microarray (TMA) formats, staining highlights mitotically active cells across a wide range of normal and cancer tissues, allowing direct comparison of proliferation patterns across multiple tissue types within a single experiment.

The nuclear staining pattern is consistent with chromatin localization, showing dense labeling of condensed chromosomes in mitotic cells. This enables straightforward identification of mitotic figures within complex tissue architecture, including epithelial, stromal, and tumor compartments. Increased staining is commonly observed in rapidly proliferating tumors, while normal tissues show more restricted labeling confined to specific proliferative zones.

Unlike phosphorylation assays designed for signaling response studies, this antibody emphasizes tissue performance and interpretability in FFPE sections. The clear nuclear signal, low background, and compatibility with TMA workflows make it well suited for pathology-oriented analysis and large-scale tissue screening applications.

Clone MSVA-903M antibody supports reliable detection of phospho-Histone H3 in tissue sections, enabling detailed evaluation of mitotic activity and spatial distribution of proliferating cells in both normal and diseased tissues.

This antibody is also part of a broader collection of IHC antibodies validated by tissue microarray analysis, supporting consistent staining across normal and cancer tissues.

Application Notes

1. Optimal dilution of the Phospho-Histone H3 (pSer10) Antibody for IHC / HIST1H3A Immunohistochemistry Antibody should be determined by the researcher.

2. This Phospho-Histone H3/Ser10 antibody is recombinantly produced by expression in CHO cells.

3. Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121oC in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:150 at 37oC for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions.

Immunogen

A synthetic peptide corresponding to (ARK-pS-TGGKAPRKQLc) of Phosphohistone H3 (phospho S10) was used as the immunogen for the Phospho-Histone H3 (pSer10) Antibody for IHC / HIST1H3A Immunohistochemistry Antibody.

Storage

Phospho-Histone H3 (pSer10) Antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.

Alternate Names

Histone H3 Ser10 IHC antibody, phospho-H3 tissue proliferation marker antibody, H3S10ph immunohistochemistry

antibody, mitotic cell IHC marker antibody