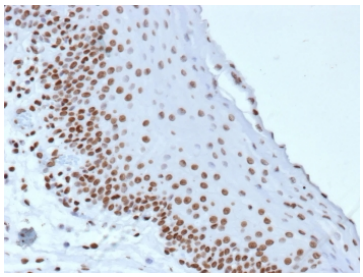
Phosphorylated Histone H3 Antibody / pS10 [clone rHH3/9924] (V5817)

Catalog No.	Formulation	Size
V5817-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5817-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5817SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

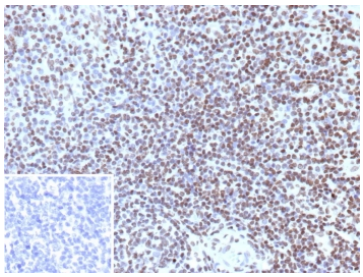
Recombinant RABBIT MONOCLONAL

Bulk quote request

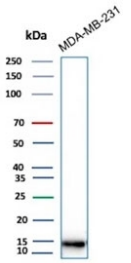
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Rabbit Monoclonal
Isotype	Mouse IgG2b, kappa
Clone Name	rHH3/9924
UniProt	P68431
Localization	Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This Phosphorylated Histone H3 antibody is available for research use only.



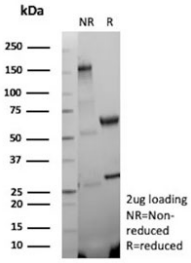
IHC staining of FFPE human tonsil tissue with Phosphorylated Histone H3 antibody (clone rHH3/9924). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human tonsil tissue with Phosphorylated Histone H3 antibody (clone rHH3/9924). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Western blot testing of human MDA-MB-231 cell lysate with Phosphorylated Histone H3 antibody.



SDS-PAGE analysis of purified, BSA-free Phosphorylated Histone H3 antibody (clone rHH3/9924) as confirmation of integrity and purity.

Description

Phosphohistone H3 (PHH3) is a marker specific for cells undergoing mitosis. Serine 10 of Histone H3 is phosphorylated in association with mitotic chromatin condensation in late G2 and M phase of the cell cycle and thus, PHH3 can distinguish mitosis from apoptotic nuclei. The range of percentage PHH3 positive tumor nuclei was from 0.0 to 6.6% (median value 0.8%). Increased expression of PHH3was significantly associated with tumor thickness (p = 0.031), presence of tumor ulceration (p =0.041) and tumor necrosis (p =0.027), but not with Clark's level of invasion. High levels of PHH3 was associated with increased mitotic count (p = 0.003) and high Ki-67 expression (p = 0.002). For central nervous system tumors, melanoma, soft tissue tumors, GIST, etc., PHH3 mAb is helpful for tumor pathological classification and prognosis. This antibody is part of a broader collection of Histone H3 antibodies used to study chromatin structure, histone modifications, and epigenetic regulation.

Application Notes

Optimal dilution of the Phosphorylated Histone H3 antibody should be determined by the researcher.

Immunogen

Amino acids ARK-pS-TGGKAPRKQLc of Phosphohistone H3 (phospho S10) were used as the immunogen for the Phosphorylated Histone H3 antibody.

Storage

Aliquot the Phosphorylated Histone H3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.