

PRODUCT INFORMATION



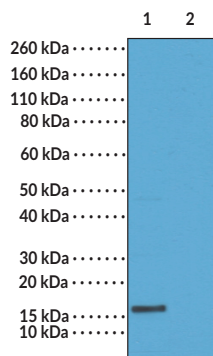
Histone H3T6Ph Monoclonal Antibody (RM160)

Item No. 32166

Overview and Properties

Contents:	This vial contains 100 µg of protein A-affinity purified monoclonal antibody.
Synonyms:	Histone H3 (Phospho-Thr6), H3pT1, H3pThr1, Phospho-Histone H3 Threonine 6, Phosphorylated Histone H3 Threonine 6
Immunogen:	Peptide corresponding to H3T6Ph
Cross Reactivity:	(+) H3T6Ph; (-) Other phosphorylated histones
Species Reactivity:	(+) Vertebrates
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Concentration:	1 mg/ml
Clone:	RM160
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA, multiplex-based assays, and Western blot (WB); the recommended starting concentration for ELISA is 0.2-1 µg/ml and 0.1-1 µg/ml for multiplex-based assays and WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image



Lane 1: HeLa cells treated
Lane 2: HeLa cells untreated

WB of acid extracts of HeLa cells treated with nocodazole or left untreated using Histone H3T6Ph Monoclonal Antibody (RM160) at a concentration of 0.1 µg/ml.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

Histone H3 is a nuclear protein and a component of the nucleosome core, a basic unit of chromatin, that is essential for organizing genomic DNA in eukaryotic nuclei.¹ It is a globular protein that contains an unstructured N-terminal tail that extends outside of the nucleosome core and is subject to various post-translational modifications (PTMs), including methylation, phosphorylation, acetylation, and citrullination.^{1,2} Phosphorylation of histone H3 at threonine 6 (H3T6Ph) is associated with transcriptional activation.³ Tumor levels of H3T6Ph are positively correlated with malignancy in patients with prostate cancer. Cayman's Histone H3T6Ph Monoclonal Antibody (RM160) can be used for ELISA, multiplex-based assay, and Western blot (WB) applications.

References

1. Hyun, K., Jeon, J., Park, K., *et al.* Writing, erasing and reading histone lysine methylations. *Exp. Mol. Med.* **49(4)**, e324 (2017).
2. Sharda, A., Amnekar, R.V., Natu, A., *et al.* Histone posttranslational modifications: Potential role in diagnosis, prognosis, and therapeutics of cancer. *Prognostic Epigenetics*. Sharma, S., editor, *Academic Press* (2019).
3. Metzger, E., Imhof, A., Patel, D., *et al.* Phosphorylation of histone H3T6 by PKC β 1 controls demethylation at histone H3K4. *Nature* **464(7289)**, 792-796 (2010).

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