

# PRODUCT INFORMATION



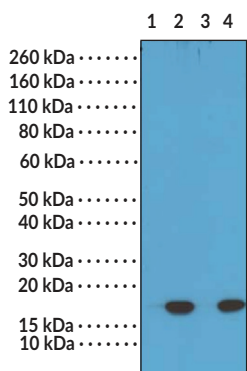
## Histone H3K36M Monoclonal Antibody (Clone RM193)

Item No. 31547

### Overview and Properties

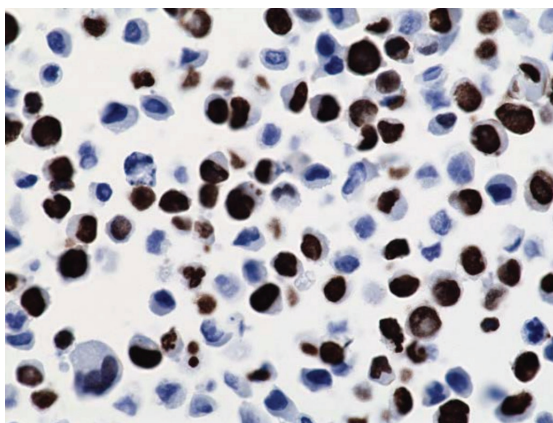
<b>Contents:</b>	This vial contains 100 or 400 µl of protein A-affinity purified monoclonal antibody.
<b>Immunogen:</b>	A peptide corresponding to histone H3K36M mutant
<b>Cross Reactivity:</b>	(-) Wild-type histone H3
<b>Species Reactivity:</b>	(+) Histone H3K36M mutant
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
<b>Clone:</b>	RM193
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	ELISA, immunohistochemistry (IHC), and Western blot (WB); the recommended starting dilution for ELISA is 1:250-1:2,500, 1:100-1:500 for IHC, and 1:200-1:1,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



Lane 1: H3.1 WT  
Lane 2: H3.1 K36M  
Lane 3: H3.3 WT  
Lane 4: H3.3 K36M

WB analysis of cell lysates prepared from 293T transfected with a DNA construct encoding wild-type or K36M mutant proteins of histone H3.1 and H3.3, using Histone H3K36M Monoclonal Antibody.



Immunohistochemical staining of formalin-fixed and paraffin-embedded 293T cells transfected with a DNA construct encoding histone H3K36M, stained with Histone H3K36M Monoclonal Antibody.

**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**  
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**CAYMAN CHEMICAL**  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM

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## Description

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Histone H3 undergoes many modifications including acetylation, methylation, and phosphorylation that are important for regulation of gene transcription. Lysine 36 of histone 3 (H3K36) has functionally relevant acetylation and methylation states with roles in transcriptional activation. More than 90% of chondroblastomas contain a heterozygous mutation, replacing H3K36 with methionine 36 (H3K36M) in the histone H3 variant H3.3.<sup>1</sup> This antibody reacts to the H3K36M mutant and does not detect wild-type histone H3.

## Reference

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1. Fang, D., Gan, H., Lee, J.-H., *et al.* The histone H3.3K36M mutation reprograms the epigenome of chondroblastomas. *Science* **352(6291)**, 1344-1348 (2016).

CAYMAN CHEMICAL  
1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA  
PHONE: [800] 364-9897  
[734] 971-3335  
FAX: [734] 971-3640  
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