

# PRODUCT INFORMATION

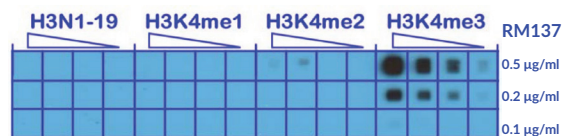


## Trimethyl Histone H3 (Lys4) Monoclonal Antibody (Clone RM137) Item No. 20718

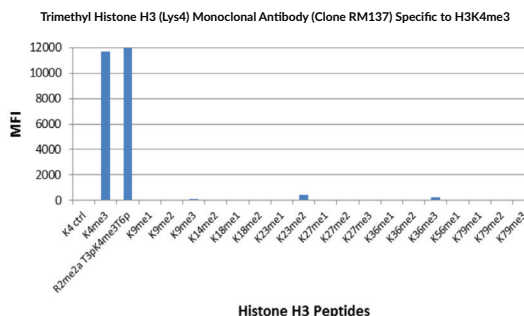
### Overview and Properties

<b>Contents:</b>	This vial contains 100 µg of protein A-affinity purified antibody from an animal origin free culture supernatant
<b>Immunogen:</b>	A trimethyl-peptide corresponding to trimethyl-histone H3 (Lys4)
<b>Cross Reactivity:</b>	(+) Histone H3 trimethylated at lysine 4 (K4me3); (-) Monomethylated lysine 4 (K4me1), dimethylated lysine 4 (K4me2), other methylations in histone H3
<b>Species Reactivity:</b>	(+) All species
<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>	RM137
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	ELISA, multiplex-based assays, and Western blot (WB); the recommended starting concentration for ELISA and multiplex-based assays is 0.1-0.5 µg/ml and 0.2-1 µg/ml for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

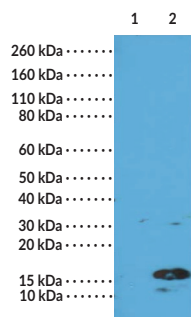
### Images



A peptide dotblot shows Trimethyl Histone H3 (Lys4) Monoclonal Antibody (Clone RM137) reacts only to histone H3 trimethyl-lysine 4 (K4me3). No cross reactivity with nonmodified lysine 4 (H3N1-19), monomethylated lysine 4 (K4me1) or dimethylated lysine 4 (K4me2).



Trimethyl Histone H3 (Lys4) Monoclonal Antibody (Clone RM137) specifically reacts to histone H3 trimethylated at lysine 4 (K4me3). No cross reactivity with other methylated lysines in histone H3.



Lane 1: Recombinant histone H3.3  
Lane 2: Acid extracts of HeLa cells

WB of recombinant histone H3.3 and acid extracts of HeLa cells, using 0.5 µg/ml of Trimethyl Histone H3 (Lys4) Monoclonal Antibody (Clone RM137). This showed a band of histone H3 trimethylated at lysine 4 (K4me3) in HeLa cells.

**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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## Description

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Histone H3 undergoes many modifications including acetylation, methylation, and phosphorylation that are important for regulation of gene transcription. Methylation at lysine 4 of histone 3 (H3K4) is an evolutionarily conserved modification associated with transcriptionally active chromatin. The SET1/MLL (KMT2) family of methyltransferases is the principal enzyme family responsible for H3K4 methylations. This antibody reacts to histone H3 trimethylated at lysine 4 (K4me3) and does not detect monomethylated lysine 4 (K4me1), dimethylated lysine 4 (K4me2), or other methylations in histone H3.

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