H3K36me3 Recombinant Rabbit Monoclonal Antibody (RM155), ChIP-Verified

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Published Species	Mouse, Human
Host/Isotype	Rabbit / IgG
Expression system	HEK293 cells
Class	Recombinant Monoclonal
Type	Antibody
Clone	RM155
Conjugate	Unconjugated
Immunogen	Tri-methyl-peptide corresponding to tri-methyl-Histone H3 (Lys36).
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.2-7.4, with 50% glycerol, 1% BSA
Contains	0.09% sodium azide
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2661912

Applications	Tested Dilution	Publications
Western Blot (WB)	0.5-2 µg/mL	2 Publications
Immunocytochemistry (ICC/IF)	5 µg/mL	-
ELISA (ELISA)	0.2-1 µg/mL	-
ChIP assay (ChIP)	1-5 µg	-
ChIP-sequencing (ChIP-Seq)	3 µg	-
Luminex (LUM)	0.1-0.5 µg/mL	-
Peptide array (Array)	0.25 µg/mL	-

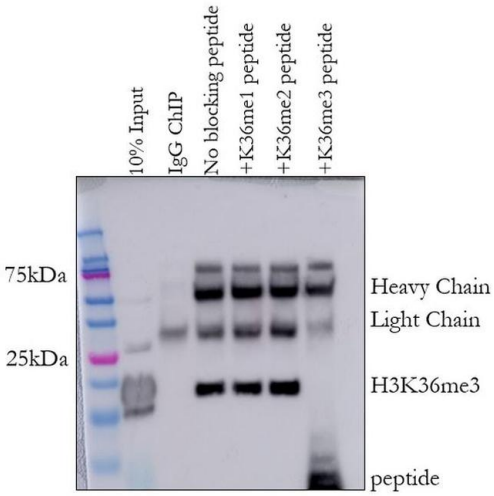
Product Specific Information

This antibody reacts to Histone H3 trimethylated at Lysine 36 (K36me3). No cross reactivity with monomethylated Lysine 36 (K36me1) or dimethylated Lysine 36 (K36me2), or other methylations in histone H3.

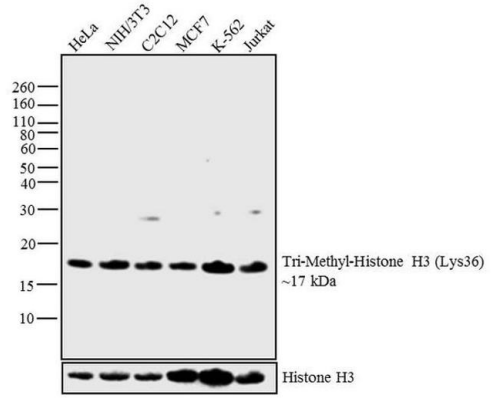
Recombinant rabbit monoclonal antibodies are produced using in vitro expression systems. The expression systems are developed by cloning in the specific antibody DNA sequences from immunoreactive rabbits. Then, individual clones are screened to select the best candidates for production. The advantages of using recombinant rabbit monoclonal antibodies include: better specificity and sensitivity, lot-to-lot consistency, animal origin-free formulations, and broader immunoreactivity to diverse targets due to larger rabbit immune repertoire.

Click here for Master Lot linking information.

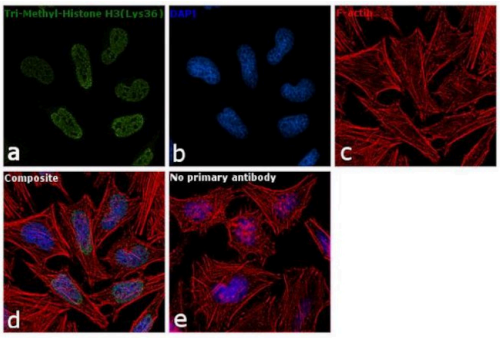
Product Images For H3K36me3 Recombinant Rabbit Monoclonal Antibody (RM155), ChIP-Verified



H3K36me3 Antibody (MA5-24687)
Antibody specificity is demonstrated by peptide competition. ChIP-western was performed on hESCs using monoclonal H3K36me3 antibody (Product # MA5-24687). Blocking peptides were added to demonstrate specificity for tri-methylation compared to mono- or di-methyl. Data courtesy of Raj Jain's lab at the University of Pennsylvania. {Neu}



H3K36me3 Antibody (MA5-24687) in WB
Western blot analysis was performed on acid extracts (20 µg lysate) of HeLa (Lane 1), NIH/3T3 (Lane 2), C2C12 (Lane 3), MCF7 (Lane 4), K-562 (Lane 5) and Jurkat (Lane 6). The blot was probed with Anti-Tri-Methyl-HistoneH3-Lys36 (Product # MA5-24687, 1 µg/mL) and detected by chemiluminescence using Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, HRP conjugate (Product # A27036, 0.25 µg/mL, 1:4000 dilution). A 17 kDa band corresponding to Tri-Methyl-HistoneH3-Lys36 was observed across the cell lines tested.



H3K36me3 Antibody (MA5-24687) in ICC/IF
Immunofluorescence analysis of Tri-Methyl-Histone H3 (Lys36) was performed using 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with Tri-Methyl-Histone H3(Lys36) Rabbit Monoclonal Antibody (RM155) (Product # MA5-24687) at 5µg/mL in 0.1% BSA and incubated overnight at 4 degree and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing nuclear localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

View more figures on thermofisher.com

2 References

Western Blot (2)

JCI insight

The epigenetic reader PHF21B modulates murine social memory and synaptic plasticity-related genes.

"MA5-24687 was used in Western Blotting to establish PHF21B as an important upstream regulator of synaptic plasticity-related genes and a candidate therapeutic target for neurobehavioral dysfunction in mice, with potential applications in human neurological and psychiatric disorders."

Authors: Chin EW,Ma Q,Ruan H,Chin C,Somasundaram A,Zhang C,Liu C,Lewis MD,White M,Smith TL,Battersby M,Yao WD,Lu XY,Arap W,Licinio J,Wong ML

Year
2022

Species
Mouse

Dilution
1:500

Cancer cell

SETD5-Coordinated Chromatin Reprogramming Regulates Adaptive Resistance to Targeted Pancreatic Cancer Therapy.

"MA5-24687 was used in Western Blot to investigate if SETD5 can act as a major driver of pancreatic ductal adenocarcinoma resistance to MEK1/2 inhibition (MEKi)."

Authors: Wang Z,Hausmann S,Lyu R,Li TM,Lofgren SM,Flores NM,Fuentes ME,Caporicci M,Yang Z,Meiners MJ,Cheek MA,Howard SA,Zhang L,Elias JE,Kim MP,Maitra A,Wang H,Bassik MC,Keogh MC,Sage J,Gozani O,Mazur PK

Year
2020

Species
Human

Dilution
1:1000