



## Anti H3K4me1, Clone RM140

**Catalogue no:** 700016

**Applications:** ChIP, WB, ELISA, Multiplex, ICC

**Concentration:** 1mg/ml

**Size:** 100µl

**Specificity:** Human

**Source:** Rabbit

**Type:** Monoclonal

**Purification:** Protein A (affinity purified)

**Storage:** +2- +8°C

### Background:

Histone 3 (H3) is one of the core histone proteins, comprising the protein component of chromatin. H3 is ubiquitous within chromosomes and can be found bound to most gene sequences throughout the genome. Monomethylation of lysine 4 on histone 4 (H3K4me1) is a histone modification associated with open chromatin and active transcription. The presence of H3K4me1 generally indicates an enhancer region of DNA.

### Immunogen:

A monomethyl-peptide corresponding to Monomethyl-Histone H3 (Lys 4).

### Buffer:

PBS with 1% BSA and 0.09% sodium azide.

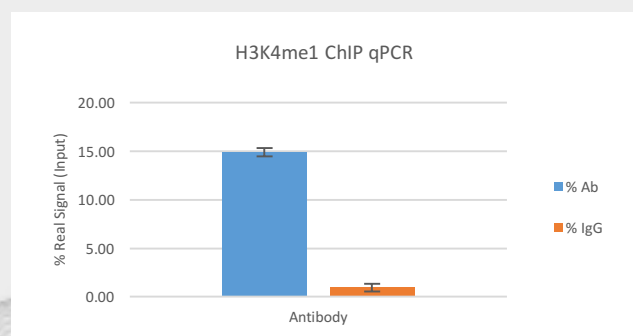
### Applications:

Application	Suggested Dilution	Figure
Chromatin Immunoprecipitation	2µg: 1µg (antibody: chromatin)	1
Western Blot	0.2µg/mL - 1µg/mL	2
Immunocytochemistry	1µg/mL - 2µg/mL	3
ELISA	0.2µg/mL – 1µg/mL	
Multiplex	0.1µg/mL – 0.5µg/mL	

Please note: Optimal antibody dilutions should be determined by the user. These volumes are stated as guidelines only.

### Fig 1. H3K4me1 ChIP qPCR

Chromatin immunoprecipitation (ChIP) assays were performed using the Chromatrap® standard ChIP-Seq spin column sonication kit (Cat no. 500189) with 30µg of chromatin from Hec50 cells and 5µg of Anti-H3K4me1 antibody. qPCR was used to analyse the enrichment of the positive H3K4me1 antibody compared with the negative control rabbit IgG antibody.

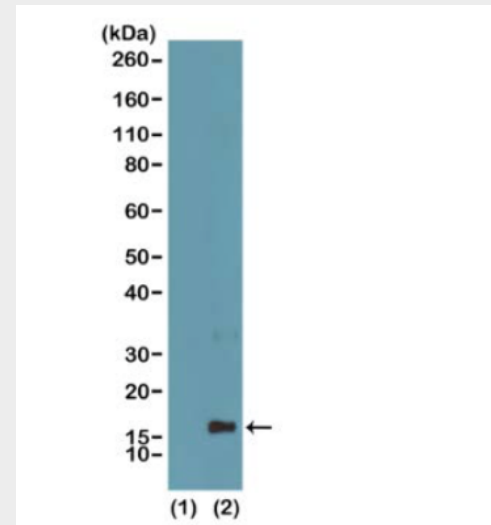


## Advancements in Epigenetics

\*This product is for research use only. There is a possibility that results may vary between antibody lots.

### Fig 2. H3K4me1 Western Blot

Western Blot of Recombinant histone H3 (1) and acid extracts of HeLa cells (2), using RM140 at 0.5 $\mu$ g/mL, showed a band of histone H3 monomethylated at Lysine 4 (H3K4me1) in HeLa cells.



### Fig 2. H3K4me1 Immunocytochemistry

Immunocytochemistry of HeLa cells, using monomethyl-histone H3 (Lys 4) Rabbit mAb RM 140 (red). Actin filaments have been labelled with fluorescein phalloidin (green).

