

## Rabbit Anti-H3K9me3 with Positive & Negative primer sets

<b>Catalogue no:</b>	900005	<b>Source:</b>	Rabbit
<b>Applications:</b>	ChIP, WB, Dot blot, ELISA	<b>Type:</b>	Monoclonal
<b>Concentration:</b>	1mg/ml	<b>Purification:</b>	Protein A (affinity purified)
<b>Size:</b>	50µl	<b>Storage:</b>	-20°C
<b>Specificity:</b>	Human, vertebrates. No cross reactivity with monomethylated Lysine 9 (K9me1), dimethylated Lysine 9 (K9me2), or other methylations in histone H3.		



## Background

Histone 3 tri methyl K9 (H3K9me3) is a histone mark associated with repressed chromatin. It condenses and compacts the chromatin, restricting the transcription machinery from binding and carrying out gene expression. It is a marker of constitutive heterochromatin, and generally associated with gene silencing. As a histone mark, it is widely found throughout human cell lines, serving as an abundant antibody target for ChIP.

A rabbit IgG is included in this Antibody Primer set as a negative control for the ChIP experiment.

H3K9me3 is usually associated with closed chromatin and repressive transcription. The positive primer set included in this antibody-primer set recognises a protein-coding gene that is present when transcription is switched off. The negative gene target included recognises a gene that is associated with open chromatin and active transcription at multiple loci within the genome.

## Immunogen

A trimethyl-peptide corresponding to Trimethyl-Histone H3 (Lys9).

## Buffer

50% Glycerol/PBS with 1% BSA and 0.09% sodium azide

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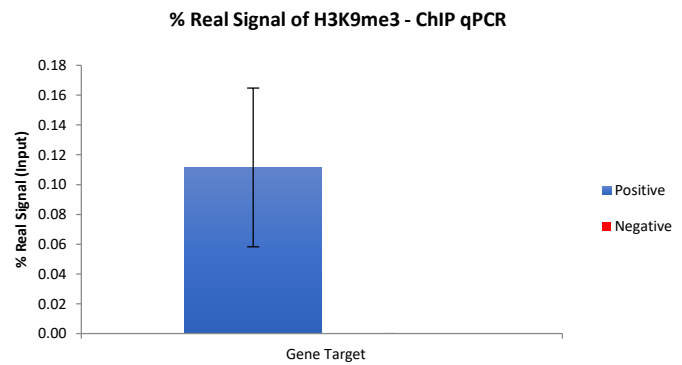
## Suggested Usage

Component	Suggested Dilution	Figure
H3K9me3	2:1 (antibody: chromatin)	1
Rabbit IgG	2:1 (antibody: chromatin)	1
Positive primer set	Dilute from 4 $\mu$ M (supplied) to 1 $\mu$ M final reaction concentration	1
Negative primer set	Dilute from 4 $\mu$ M (supplied) to 1 $\mu$ M final reaction concentration	1

\*This product is for research use only. Results may vary between antibody lots.

Chromatin immunoprecipitation (ChIP) assays were performed using the Chromatrap® standard ChIP spin column sonication kit for qPCR (Cat no. 500071) with 1 $\mu$ g of chromatin from Hec50 cells and 2 $\mu$ g of Anti-H3K9me3 antibody. qPCR was used to analyse the enrichment of H3K9me3 onto the positive gene locus.

**Figure 1. H3K9me3 ChIP qPCR**



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