

## ChIP Validated H4K12ac (Clone RM202) Antibody with Positive Primer Set



Catalogue no: 900030

Chromatrap®'s ChIP Validated H4K12ac Antibody with Positive Primer Set provides a complete set of tools to assist with a successful ChIP assay. Including: H4K12ac antibody, control rabbit IgG, and positive primer sets. The ChIP Validated H4K12ac Antibody with Positive Primer Set is not suitable for use with non-human species.

### Background:

Histone 4 (H4) is one of the core histone proteins, comprising the protein component of chromatin. H4 is ubiquitous within chromosomes and can be found bound to most gene sequences throughout the genome. Lysine 12 on histone 4 (H4K12) can only be acetylated and is not associated with methylation. The histone modification H4K12ac is associated with active promoter regions and has roles in activating the transcription of genes, in particular genes with roles in memory and learning. H4K12ac can have an influence on paternal inheritance in the zygote, indicating the importance of this mark for embryo development.

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

The H4K12ac positive primer set recognises the GREB1 gene.

### Suggested Usage:

Component	Suggested Dilution	Figure
H4K12ac	2:1 (antibody: chromatin)	1
Rabbit IgG	2:1 (antibody: chromatin)	1
Positive Primer Set	Dilute from 4µM (provided) to 1µM working concentration	

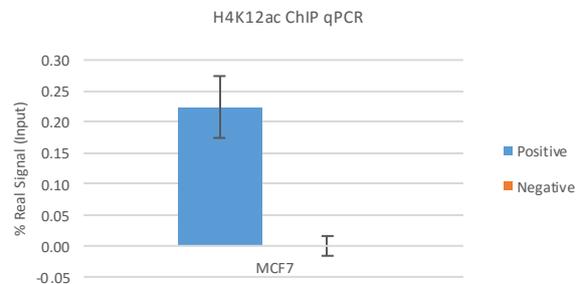
Please note: Optimal dilutions should be determined by the user. These volumes are stated as guidelines only.

### Advancements in Epigenetics

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

**Fig 1. H4K12ac ChIP qPCR**

Chromatin immunoprecipitation (ChIP) assays were performed using the Chromatrap® standard ChIP-Seq spin column sonication kit for (Cat no. 500189). The breast cancer cell line MCF7 cells were treated with 10 $\mu$ M 17-B estradiol for 2h prior to chromatin extraction. For immunoprecipitation 1 $\mu$ g of chromatin with 2 $\mu$ g of Anti-H4K12ac antibody was used. qPCR was used to analyse the enrichment of the positive H4K12ac antibody on both a positive and negative gene target.



**Applications:** ChIP

**Concentration:** 1mg/ml

**Size:** 50 $\mu$ l

**Specificity:** Human

**Storage Conditions:** The H4K12ac antibody should be stored at +4°C. Rabbit IgG and positive primer set should all be stored at -20°C (*Avoid multiple freeze/thaw cycles as this may denature the antibody and degrade the primer sets*)

**Source:** Rabbit

**Type:** Monoclonal

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

**Advancements in Epigenetics**

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