

## HDAC5/9 (Phospho Ser259/220) Rabbit pAb

CatalogNo: YP0299

### Key Features

#### Host Species

- Rabbit

#### Reactivity

- Human, Mouse

#### Applications

- WB, IHC, IF, ELISA

#### MW

- 121kD (Observed)

#### Isotype

- IgG

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

### Recommended Dilution Ratios

**WB 1:500-1:2000**

**IHC 1:100-1:300**

**ELISA 1:10000**

**IF 1:50-200**

### Basic Information

**Clonality** Polyclonal

### Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human HDAC5 around the phosphorylation site of Ser259. AA range:225-274

## Specificity

This antibody detects endogenous levels of HDAC5/9 only when phosphorylated at Human:S259/220, Mouse:S250/220 and dually phosphorylated at two sites. The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):TAsEP

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## Target Information

**Gene name** HDAC5/HDAC9

**Protein Name** Histone deacetylase 5/9

Organism	Gene ID	UniProt ID
Human	<a href="#">10014</a> ; <a href="#">9734</a> ;	<a href="#">Q9UQL6</a> ; <a href="#">Q9UKV0</a> ;
Mouse	<a href="#">79221</a> ;	

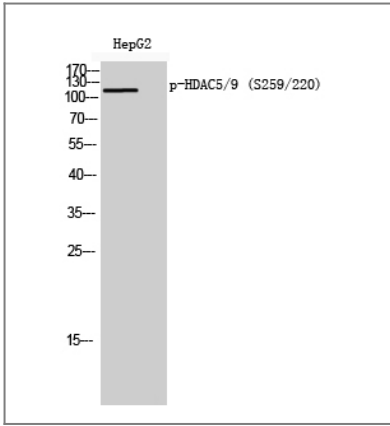
**Cellular Localization** Nucleus. Cytoplasm. Shuttles between the nucleus and the cytoplasm. In muscle cells , it shuttles into the cytoplasm during myocyte differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-259 and Ser-498 by AMPK , CaMK1 and SIK1.

**Tissue specificity** Ubiquitous.

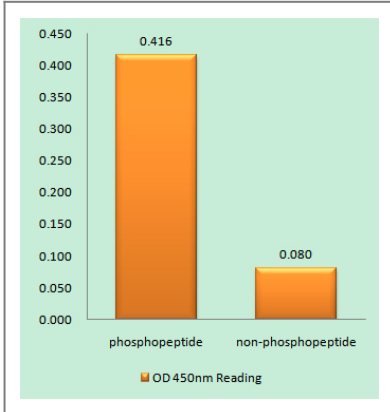
**Function** Catalytic activity:Hydrolysis of an N (6) -acetyl-lysine residue of a histone to yield a deacetylated histone. ,Domain:The nuclear export sequence mediates the shuttling between the nucleus and the cytoplasm. ,Function:Responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A , H2B , H3 and H4) . Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation , cell cycle progression and developmental events. Histone deacetylases act via the formation of large multiprotein complexes. Involved in muscle maturation by repressing transcription of myocyte enhancer MEF2C. During muscle differentiation , it shuttles into the cytoplasm , allowing the expression of myocyte enhancer factors. ,PTM:Phosphorylated by CaMK at Ser-259 and Ser-498. The phosphorylation is required for the export to the cytoplasm. ,PTM:Ubiquitinated. Polyubiquitination however does not lead to its degradation. ,similarity:Belongs to the histone deacetylase family. Type 2 subfamily. ,subcellular location:Shuttles between the nucleus and the cytoplasm. In muscle cells , it shuttles into the cytoplasm during myocyte differentiation. The export to cytoplasm depends on the interaction with a 14-3-3 chaperone protein and is due to its phosphorylation at Ser-259 and Ser-498 by CaMK. ,subunit:Interacts with AHRR (By similarity) . Interacts with BCOR , HDAC7 , HDAC9 , CTBP1 , MEF2C , NCOR2 , NRIP1 , PHB2 and a 14-3-3 chaperone protein. Interacts with KDM5B. ,tissue specificity:Ubiquitous. ,

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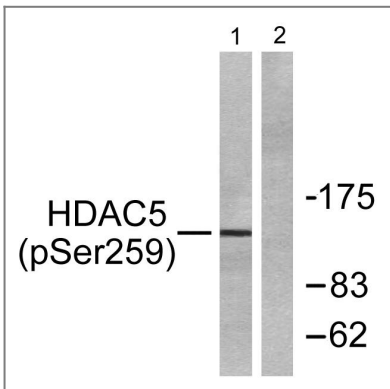
## Validation Data



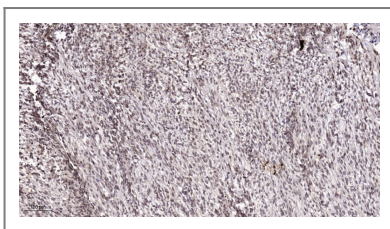
Western Blot analysis of HepG2 cells using Phospho-HDAC5/9 (S259/220) Polyclonal Antibody diluted at 1:2000



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using HDAC5 (Phospho-Ser259) Antibody



Western blot analysis of lysates from HepG2 cells, using HDAC5 (Phospho-Ser259) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200 (4°C overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200 (room temperature, 45min).

## Contact information

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Please scan the QR code to access additional product information:  
**HDAC5/9 (Phospho Ser259/220) Rabbit pAb**

