



Rabbit Anti-phospho-HDAC1 (Ser423+Ser421) antibody

SL5388R

Product Name:	phospho-HDAC1 (Ser423+Ser421)
Chinese Name:	磷酸化组蛋白去乙酰化酶1抗体
Alias:	HDAC1 (phospho S421 + S423); p-HDAC1 (phospho S421 + S423); dHDAC1 (phospho S421 + S423); p-dHDAC1 (phospho S421 + S423); DKFZp686H12203; GON10; HD 1; HD1; HDAC 1; hdac1; histone deacetylase 1; Histone deacetylase 1 (HD1); Histone deacetylase 1; RPD3 (reduced potassium dependency yeast homolog) like 1; RPD3 (reduced potassium dependency); RPD3; RPD3L1; HDAC2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human HDAC1 around the pho sphorylation site of Ser423+Ser421:EF(p-S)D(p-S)E
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed:[PubMed](#)

Histone acetylation and deacetylation, catalyzed by multisubunit complexes, play a key role in the regulation of eukaryotic gene expression. The protein encoded by this gene belongs to the histone deacetylase/acuc/apha family and is a component of the histone deacetylase complex. It also interacts with retinoblastoma tumor-suppressor protein and this complex is a key element in the control of cell proliferation and differentiation. Together with metastasis-associated protein-2, it deacetylates p53 and modulates its effect on cell growth and apoptosis. [provided by RefSeq, Jul 2008]

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. Deacetylates SP proteins, SP1 and SP3, and regulates their function. Component of the BRG1-RB1-HDAC1 complex, which negatively regulates the CREST-mediated transcription in resting neurons. Upon calcium stimulation, HDAC1 is released from the complex and CREBBP is recruited, which facilitates transcriptional activation. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Deacetylates 'Lys-310' in RELA and thereby inhibits the transcriptional activity of NF-kappa-B. Component a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development.

Product Detail:**Subcellular Location:**

Nucleus.

Tissue Specificity:

Widely expressed; lower levels in brain and lung.

Post-translational modifications:

S-nitrosylated by GAPDH. In neurons, S-Nitrosylation at Cys-262 and Cys-274 does not affect the enzyme activity but abolishes chromatin-binding, leading to increases acetylation of histones and activate genes that are associated with neuronal development. In embryonic cortical neurons, S-Nitrosylation regulates dendritic growth and branching.

Similarity:

Belongs to the histone deacetylase family. HD type 1 subfamily.

SWISS:

Q13547

Gene ID:

3065

Database links:

[Entrez Gene: 3065](#) Human

[Entrez Gene: 433759](#) Mouse

[Entrez Gene: 297893](#) Rat

[Entrez Gene: 404126](#) Cow

[Omim: 601241](#) Human

[SwissProt: Q32PJ8](#) Cow

[SwissProt: Q13547](#) Human

[SwissProt: O09106](#) Mouse

[SwissProt: Q4QQW4](#) Rat

[Unigene: 88556](#) Human

[Unigene: 202504](#) Mouse

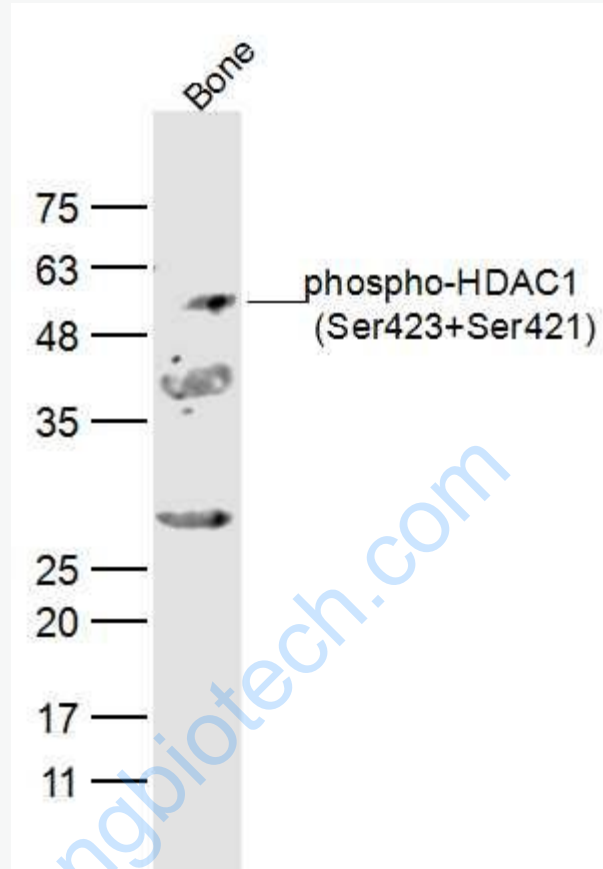
[Unigene: 391033](#) Mouse

[Unigene: 1863](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

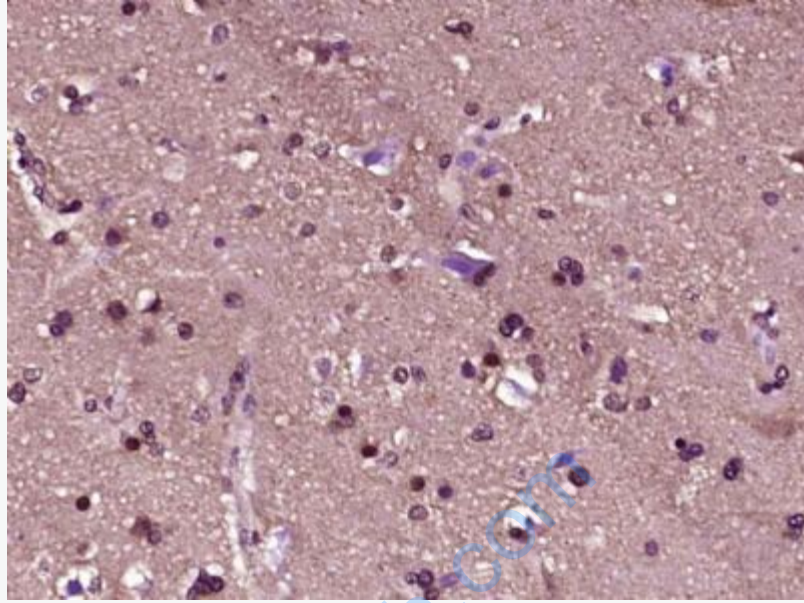
Bone (Mouse) Lysate at 40 ug

Primary: Anti-phospho-HDAC1 (Ser423+Ser421) (SL5388R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 55 kD



Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-HDAC1 (Ser423+Ser421)) Polyclonal Antibody, Unconjugated (SL5388R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.