



Rabbit Anti-HDAC5 antibody

SL2810R

Product Name:	HDAC5
Chinese Name:	组蛋白去乙酰化酶5抗体
Alias:	HD 5; HD5; HDAC 5; Histone deacetylase 5; KIAA0600; NY CO 9; Antigen NY CO 9; FLJ90614; HDAC5_HUMAN; Antigen NY-CO-9.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,
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:	123kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HDAC5:701-800/1122
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
Product Detail:	Histones play a critical role in transcriptional regulation, cell cycle progression, and developmental events. Histone acetylation/deacetylation alters chromosome structure and affects transcription factor access to DNA. The protein encoded by this gene belongs to the class II histone deacetylase/acuc/apha family. It possesses histone deacetylase activity and represses transcription when tethered to a promoter. It coimmunoprecipitates only with HDAC3 family member and might form multicomplex

proteins. It also interacts with myocyte enhancer factor-2 (MEF2) proteins, resulting in repression of MEF2-dependent genes. This gene is thought to be associated with colon cancer. Two transcript variants encoding different isoforms have been found for this gene. [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. 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.

Subunit:

Interacts with AHRR. Interacts with BAHD1, BCOR, HDAC7, HDAC9, CTBP1, MEF2C, NCOR2, NRIP1, PHB2 and a 14-3-3 chaperone protein. Interacts with KDM5B. Interacts with MYOC. Interacts with GRK5. Interacts with DDIT3/CHOP.

Subcellular Location:

Nucleus. Cytoplasm. Note=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.

Post-translational modifications:

Phosphorylated by AMPK, CaMK1, SIK1 and PRKD1 at Ser-259 and Ser-498. The phosphorylation is required for the export to the cytoplasm and inhibition.

Phosphorylated by the PKC kinases PKN1 and PKN2, impairing nuclear import.

Phosphorylated by GRK5, leading to nuclear export of HDAC5 and allowing MEF2-mediated transcription.

Ubiquitinated. Polyubiquitination however does not lead to its degradation.

Similarity:

Belongs to the histone deacetylase family. HD type 2 subfamily.

SWISS:

Q9UQL6

Gene ID:

10014

Database links:

[Entrez Gene: 10014](#)Human

[Entrez Gene: 15184](#)Mouse

[Entrez Gene: 84580](#)Rat

[Omim: 605315](#)Human

[SwissProt: Q9UQL6](#)Human

[SwissProt: Q9Z2V6](#)Mouse

[Unigene: 438782](#)Human

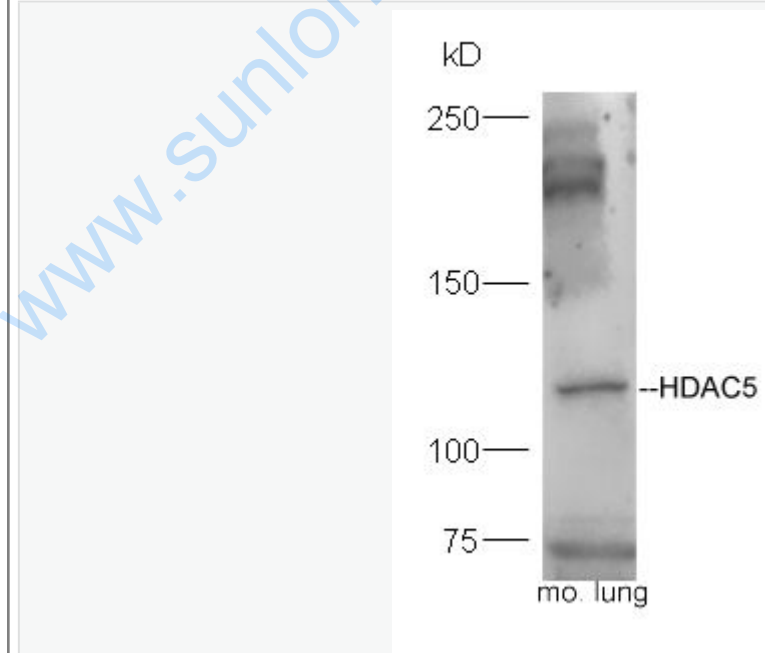
[Unigene: 22665](#)Mouse

Important Note:

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

组蛋白去乙酰化酶(HDACs)是一组在细胞染色质水平、通过诱导组蛋白去乙酰化来调控包括染色质重组、转录活化或抑制、细胞周期、Cell differentiation及Apoptosis等一系列生物学效应的酶，特别是与细胞活化后的基因转录表达调控有关。

Picture:



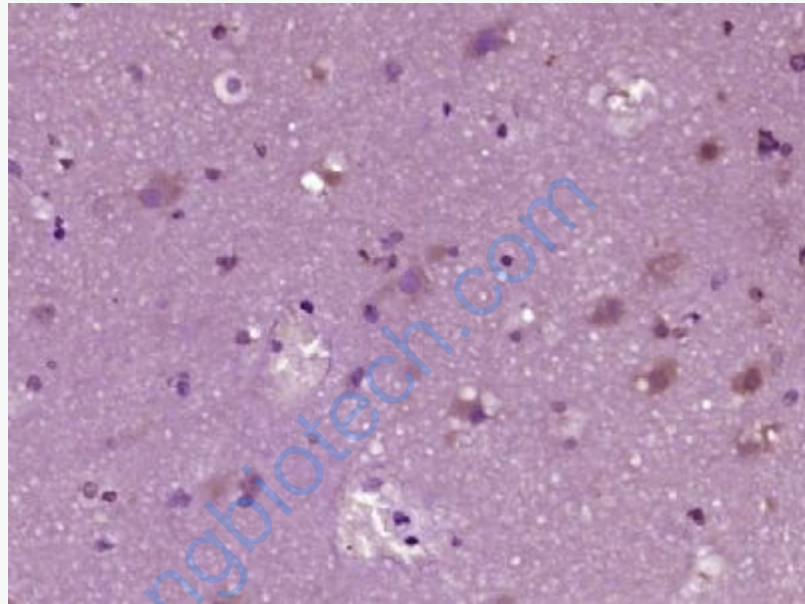
Sample: Lung(Mouse) lysate at 30ug;

Primary: Anti-HDAC5 (SL2810R) at 1:300 dilution;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL2810R) at 1: 5000 dilution;

Predicted band size:123 kD

Observed band size:123 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 (HDAC5) Polyclonal Antibody, Unconjugated (SL2810R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.