



Rabbit Anti-HDAC2 antibody

SL1813R

Product Name:	HDAC2
Chinese Name:	组蛋白去乙酰化酶2抗体
Alias:	histone deacetylase 2; D10Wsu179e; EC 3.5.1.98; HD2; HDAC 2; Hdac2; histone deacetylase 2; RPD3; transcriptional regulator homolog RPD3; YAF1; YY1 associated factor 1; YY1 transcription factor binding protein; Yy1bp; HDAC2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=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:	53kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HDAC2:391-488/488
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:	This gene product belongs to the histone deacetylase family. Histone deacetylases act via the formation of large multiprotein complexes, and are responsible for the deacetylation of lysine residues at the N-terminal regions of core histones (H2A, H2B, H3 and H4). This protein forms transcriptional repressor complexes by associating with many different proteins, including YY1, a mammalian zinc-finger transcription factor.

Thus, it plays an important role in transcriptional regulation, cell cycle progression and developmental events. Alternative splicing results in multiple transcript variants. [provided by RefSeq].

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. Forms transcriptional repressor complexes by associating with MAD, SIN3, YY1 and N-COR. Interacts in the late S-phase of DNA-replication with DNMT1 in the other transcriptional repressor complex composed of DNMT1, DMAP1, PCNA, CAF1. Deacetylates TSHZ3 and regulates its transcriptional repressor activity. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development.

Subunit:

Component of a RCOR/GFI/KDM1A/HDAC complex. Interacts directly with GFI1 and GFI1B. Interacts with SNW1, HDAC7, PRDM6, SAP30, SETDB1 and SUV39H1. Interacts with the H2AFY (via the non-histone region) (By similarity). Part of the core histone deacetylase (HDAC) complex composed of HDAC1, HDAC2, RBBP4 and RBBP7. The core complex associates with MTA2, MBD3, MTA1L1, CHD3 and CHD4 to form the nucleosome remodeling and histone deacetylation (NuRD) complex, or with SIN3, SAP18 and SAP30 to form the SIN3 HDAC complex. Component of a BHC histone deacetylase complex that contains HDAC1, HDAC2, HMG20B, KDM1A, RCOR1 and PHF21A. The BHC complex may also contain ZMYM2, ZNF217, ZMYM3, GSE1 and GTF2I. Part of a complex containing the core histones H2A, H2B, H3 and H4, DEK and unphosphorylated DAXX. Part of a complex containing ATR and CHD4. Forms a heterologous complex at least with YY1. Interacts with ATR, CBFA2T3, DNMT1, MINT, HDAC10, HCFC1, NRIP1, KDM4A and PELP1. Component of a mSin3A corepressor complex that contains SIN3A, SAP130, SUDS3, ARID4B, HDAC1 and HDAC2. Interacts with CHFR and SAP30L. Interacts (CK2 phosphorylated form) with SP3. Interacts with TSHZ3 (via its N-terminus). Interacts with APEX1; the interaction is not dependent on the acetylated status of APEX1. Part of a complex composed of TRIM28, HDAC1, HDAC2 and EHMT2.

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:

Q92769

Gene ID:

3066

Database links:

[Entrez Gene: 3066](#)Human

[Entrez Gene: 15182](#)Mouse

[Entrez Gene: 84577](#)Rat

[Omim: 605164](#)Human

[SwissProt: Q92769](#)Human

[SwissProt: P70288](#)Mouse

[Unigene: 3352](#)Human

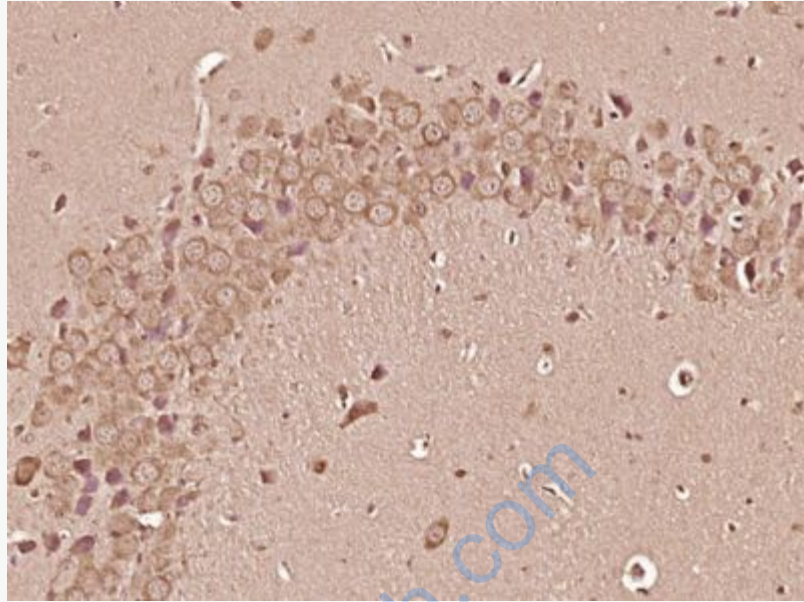
[Unigene: 19806](#)Mouse

[Unigene: 1797](#)Rat

Important Note:

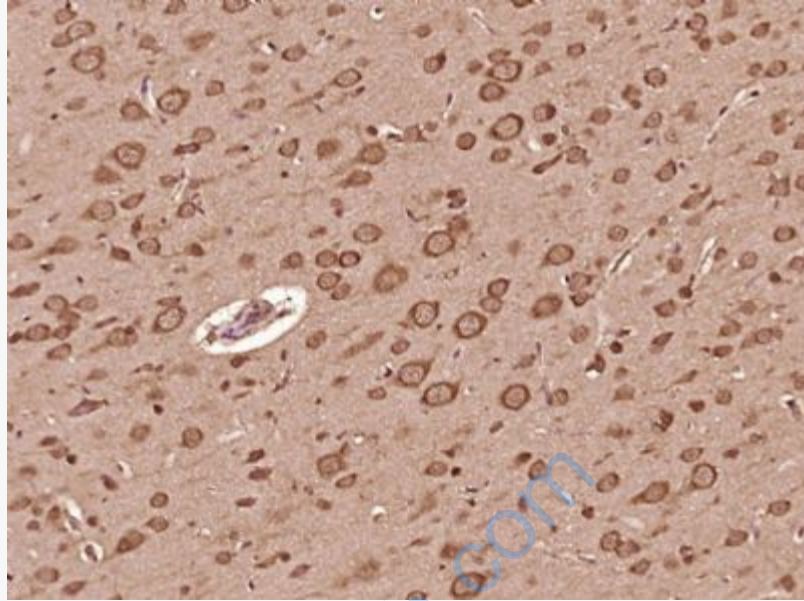
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); 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 (HDAC2) Polyclonal Antibody, Unconjugated (SL1813R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); 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 (HDAC2) Polyclonal Antibody, Unconjugated (SL1813R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.