

# Rabbit Anti-HDAC3/HD3 antibody

# SL10024R

Product Name:	HDAC3/HD3
Chinese Name:	组蛋白去乙酰化酶3抗体
Alias:	RPD3 2; RPD3-2; HD 3; HD3; HDAC 3; Histone deacetylase 3 (HD3) (RPD3-2);
	histone deacetylase 3; RPD 3; RPD3; SMAP 45; SMAP-45; SMAP45;
	HDAC3_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Cow, Horse,
Applications:	WB=1:500-2000ELISA=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:	47kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HDAC3/HD3:31-130/428
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:	<u>PubMed</u>
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 histone deacetylase/acuc/apha family. It has histone deacetylase activity and
	represses transcription when tethered to a promoter. It may participate in the regulation

of transcription through its binding with the zinc-finger transcription factor YY1. This protein can also down-regulate p53 function and thus modulate cell growth and apoptosis. This gene is regarded as a potential tumor suppressor 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), and some other non-histone substrates. 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. Probably participates in the regulation of transcription through its binding to the zinc-finger transcription factor YY1; increases YY1 repression activity. Required to repress transcription of the POU1F1 transcription factor. Acts as a molecular chaperone for shuttling phosphorylated NR2C1 to PML bodies for sumoylation.

#### Subunit:

Interacts with HDAC7 and HDAC9. Forms a heterologous complex at least with YY1. Interacts with DAXX, HDAC10 and DACH1. Found in a complex with NCOR1 and NCOR2. Component of the N-Cor repressor complex, at least composed of NCOR1, NCOR2, HDAC3, TBL1X, TBL1R, CORO2A and GPS2. Interacts with BCOR, MJD2A/JHDM3A, NRIP1, PRDM6 and SRY. Interacts with BTBD14B. Interacts with GLIS2. Interacts (via the DNA-binding domain) with NR2C1; the interaction recruits phosphorylated NR2C1 to PML bodies for sumoylation. Component of the Notch corepressor complex. Interacts with CBFA2T3 and NKAP. Interacts with APEX1; the interaction is not dependent on the acetylated status of APEX1. Interacts with and deacetylates MAPK14. Interacts with ZMYND15.

# Subcellular Location:

Nucleus:

# **Tissue Specificity:**

Widely expressed.

# Post-translational modifications:

Sumovlated in vitro.

#### Similarity:

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

# **SWISS:**

O15379

#### Gene ID:

8841

# Database links:

Entrez Gene: 8841Human

Entrez Gene: 15183 Mouse

Entrez Gene: 84578Rat

Omim: 605166Human

SwissProt: O15379Human

SwissProt: O88895Mouse

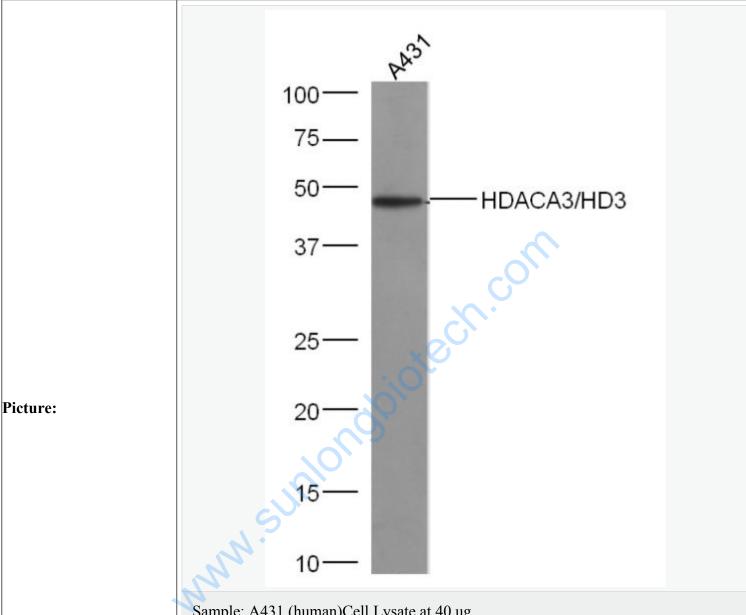
SwissProt: Q6P6W3Rat

# 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。



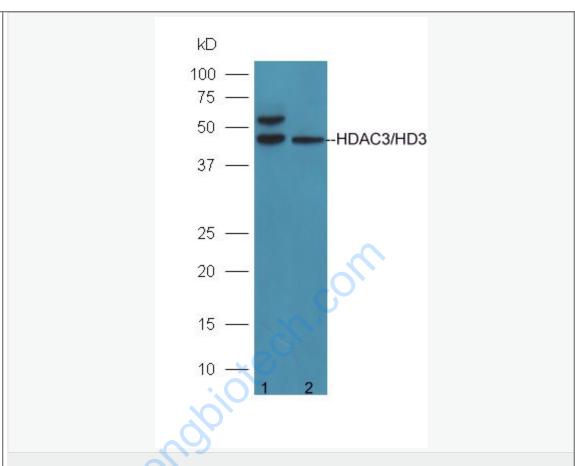
Sample: A431 (human)Cell Lysate at 40 ug

Primary: Anti-HDAC3/HD3(SL10024R) at 1/300 dilution

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

Predicted band size: 47 kD

Observed band size: 47 kD



Protein:

293T(human)cell lysates;

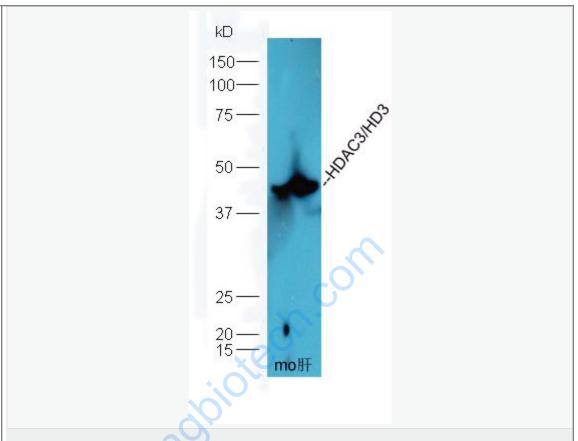
A431(human)cell lysates;

Primary: rabbit Anti-HDAC3/HD3 (SL10024R) at 1:300;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL10024R) at 1: 5000;

Predicted band size:47 kD

Observed band size:47 kD



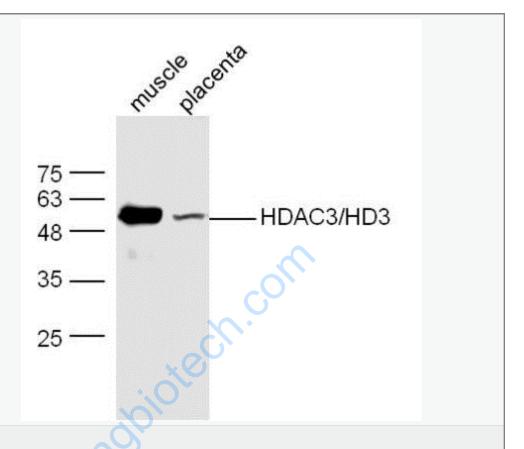
Protein: liver(mouse) lysates at 40ug;

Primary: rabbit Anti-HDAC3/HD3 (SL10024R) at 1:300;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL10024R) at 1: 5000;

Predicted band size:47 kD

Observed band size: 47 kD



# Sample:

muscle (Mouse) Lysate at 40 ug

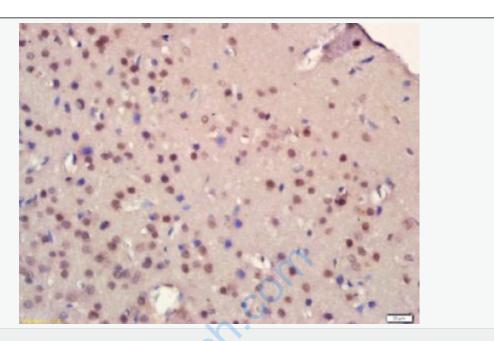
placenta (Mouse) Lysate at 40 ug

Primary: Anti-HDAC3/HD3(SL10024R) at 1/300 dilution

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

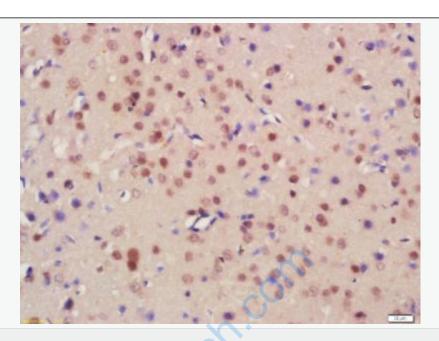
Predicted band size: 47 kD

Observed band size: 52 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-HDAC3 Polyclonal Antibody, Unconjugated(SL10024R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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