



Rabbit Anti-PDE7B antibody

SL11576R

Product Name:	PDE7B
Chinese Name:	磷酸二酯酶7B抗体
Alias:	PDE 7B; PDE7B protein; Phosphodiesterase 7B; Phosphodiesterase7B; RNPDE7B; Rolipram insensitive phosphodiesterase type 7; bA472E5.1; cAMP specific 3'5' cyclic phosphodiesterase 7B; cAMP specific 3'5' cyclic phosphodiesterase 7B; High affinity cAMP specific 3'5' cyclic phosphodiesterase; High affinity cAMP specific 3'5' cyclic phosphodiesterase; PDE7B HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=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:	52kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PDE7B:281-360/450
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:	Phosphodiesterases (PDE, also designated cyclic nucleotide phosphodiesterase) are important for the downregulation of the intracellular level of the second messenger cyclic adenosine monophosphate (cAMP) by hydrolyzing cAMP to 5'AMP.

Phosphodiesterase type 3 isoforms, PDE3A and 3B, are expressed primarily in cardiovascular tissue and adipose tissue, respectively. PDE3A, is found in myocardium and platelets and PDE3B is found in lymphocytes. The PDE7A1 (HCP1) isozyme and the PDE7A2 proteins, alternate splice products of PDE7A, are highly expressed in skeletal muscle. PDE7B is most highly expressed in pancreas. The PDE family contains proteins that serve tissue-specific roles in regulation of lipolysis, glycogenolysis, myocardial contractility, and smooth muscle relaxation.

Function:

PDE7B is a cAMP specific phosphodiesterase. The cAMP-specific phosphodiesterase type-7 (PDE7) family is comprised of 2 genes (PDE7A and PDE7B) each with multiple splice variants generated by RNA splicing and use of alternate initiation sites. PDE7B has three splice variants (PDE7B1 = 446 amino acid; PDE7B2 = 359 amino acids and PDE7B3 = 459 amino acids. Both PDE7B2 and PDE7B3 possess unique N-terminal sequences. PDE7B is expressed in various tissues including skeletal muscle, heart, lung and testis. PDE7B may be involved in the control of cAMP-mediated neural activity and cAMP metabolism in the brain.

Tissue Specificity:

Highly expressed in brain. Also expressed in heart, liver, skeletal muscle and pancreas.

Similarity:

Belongs to the cyclic nucleotide phosphodiesterase family. PDE7 subfamily.

SWISS:

Q9NP56

Gene ID:

27115

Database links:

[Entrez Gene: 27115](#)Human

[Entrez Gene: 29863](#)Mouse

[Entrez Gene: 140929](#)Rat

[Omim: 604645](#)Human

[SwissProt: Q9NP56](#)Human

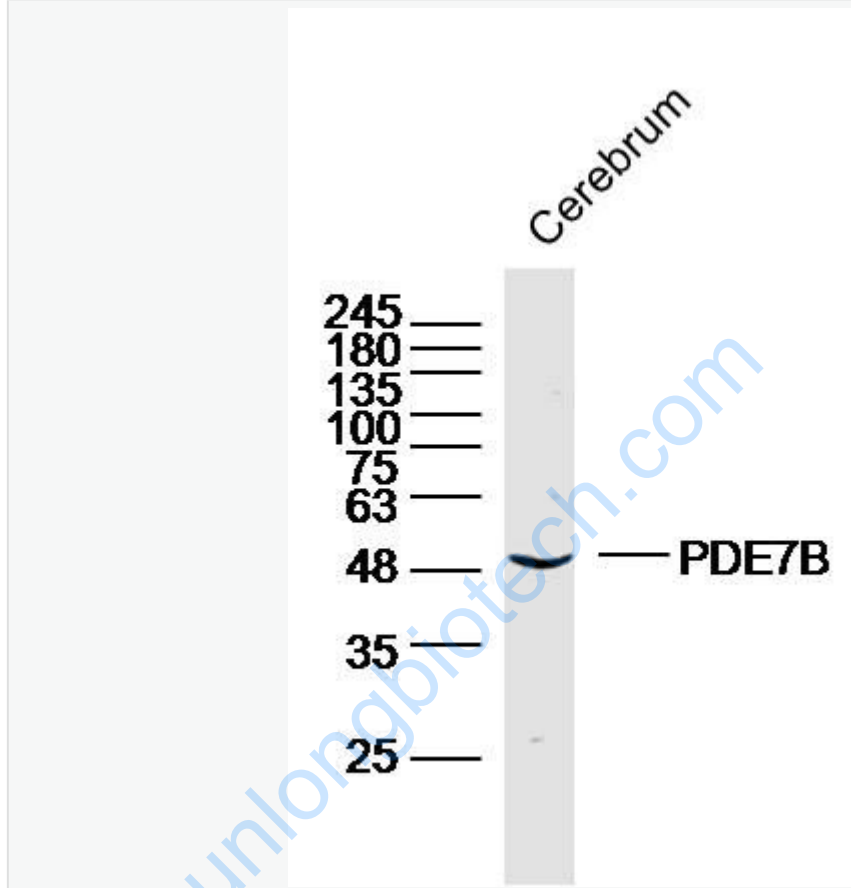
[SwissProt: Q9QXQ1](#)Mouse

[Unigene: 153615](#)Rat

Important Note:

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

Picture:



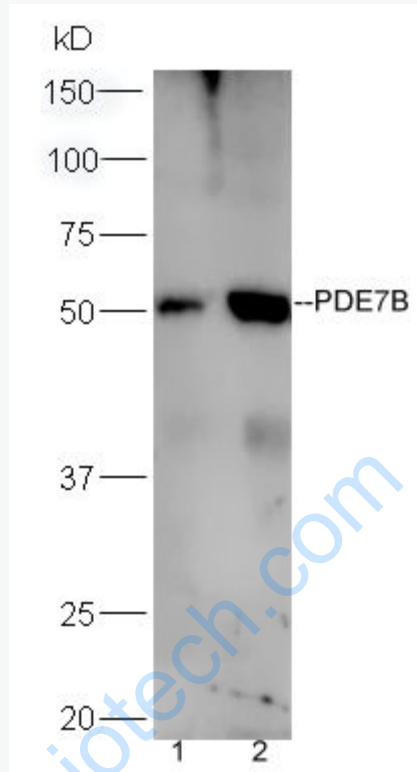
Sample: Cerebrum (Mouse) Lysate at 40 ug

Primary: Anti-PDE7B (SL11576R) at 1/300 dilution

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

Predicted band size: 52 kD

Observed band size: 52 kD



Sample:

Brain (Mouse) Lysate at 40 ug

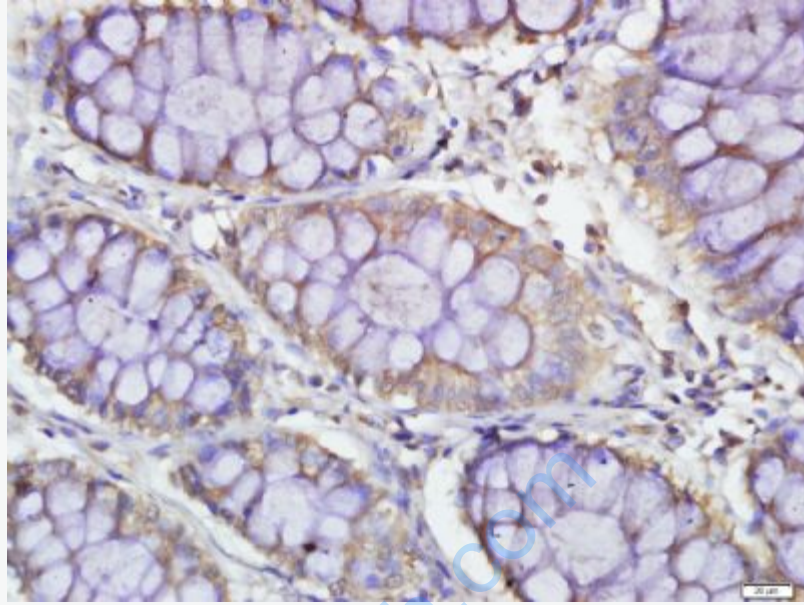
Liver (Mouse) Lysate at 40 ug

Primary: Anti-PDE7B (SL11576R) at 1/300 dilution

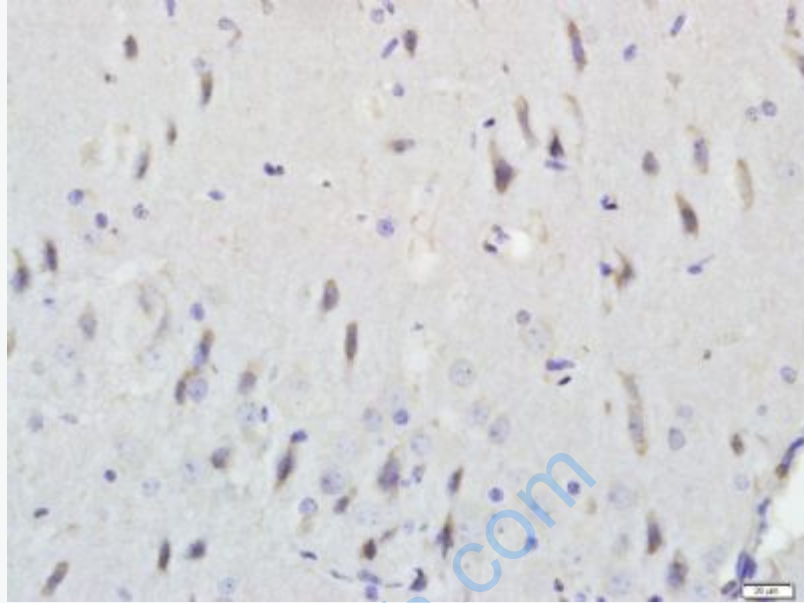
Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL11576R) at 1/5000 dilution

Predicted band size: 52 kD

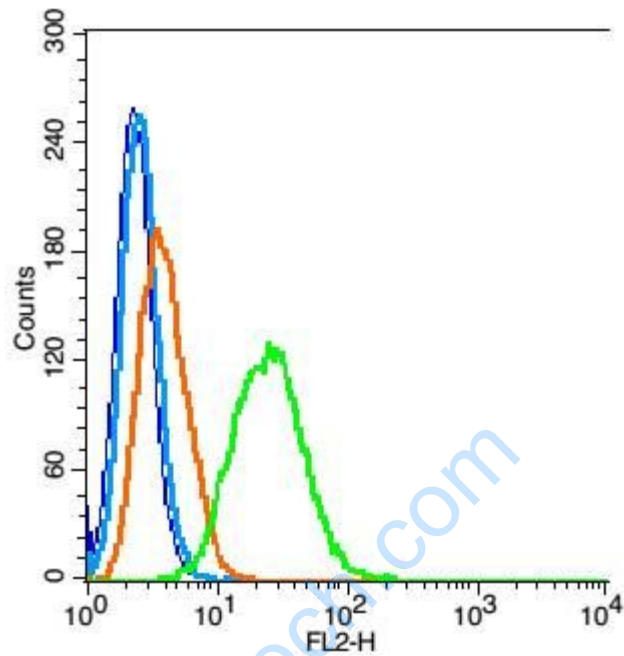
Observed band size: 52 kD



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); 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 (PDE7B) Polyclonal Antibody, Unconjugated (SL11576R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



raformaldehyde-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 (PDE7B) Polyclonal Antibody, Unconjugated (SL11576R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Blank control(blue): RSC96 cells(fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody:Rabbit Anti- PDE7B antibody(SL11576R), Dilution: 1ug in 100 uL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions);

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.