

Rabbit Anti-PDE7A antibody

SL11575R

Product Name:	PDE7A
Chinese Name:	磷酸二酯酶7抗体
Alias:	HCP 1; HCP1; High affinity cAMP specific 3'5' cyclic phosphodiesterase 7A; High affinity cAMP-specific 3"; P2A; PDE 7; PDE 7A; PDE7; PDE71; PDE7A; PDE7A_HUMAN; Phosphodiesterase 7A; Phosphodiesterase isozyme 7; Phosphodiesterase7A; Rolipram insensitive phosphodiesterase type 7; TM 22; TM22; 5"-cyclic phosphodiesterase 7A.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit,
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:	55kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PDE7A:341-440/482
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:	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:

Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes. May have a role in muscle signal transduction.

Subunit:

Interacts with CBFA2T3.

Subcellular Location:

Cytoplasm

Tissue Specificity:

PDE7A1 is found at high levels in skeletal muscle and at low levels in a variety of tissues including brain and heart. It is expressed as well in two T-cell lines. PDE7A2 is found abundantly in skeletal muscle and at low levels in heart.

Similarity:

Belongs to the cyclic nucleotide phosphodiesterase family. PDE7 subfamily.

SWISS:

O13946

Gene ID:

5150

Database links:

Entrez Gene: 5150Human

Omim: 171885Human

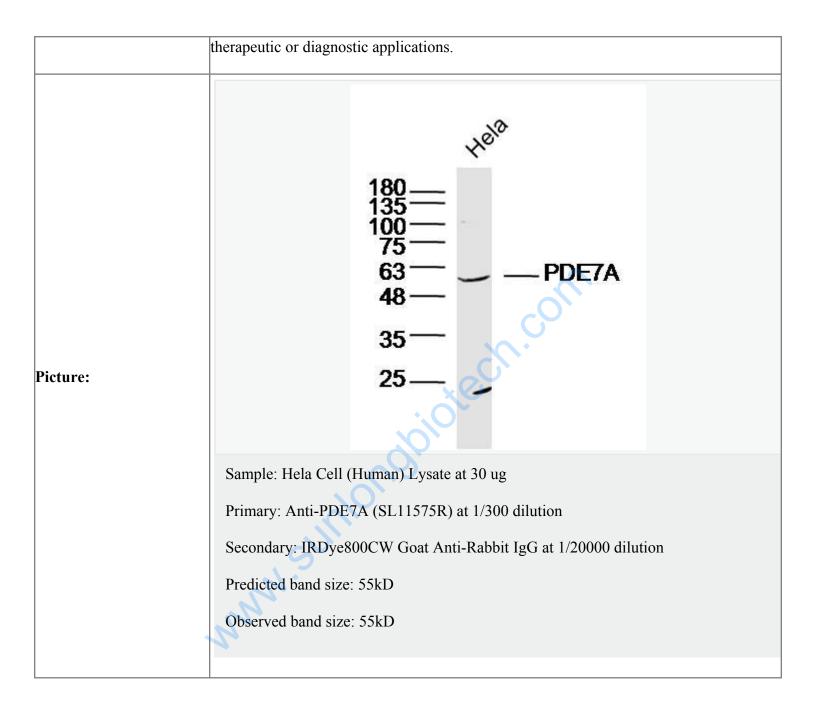
SwissProt: Q13946Human

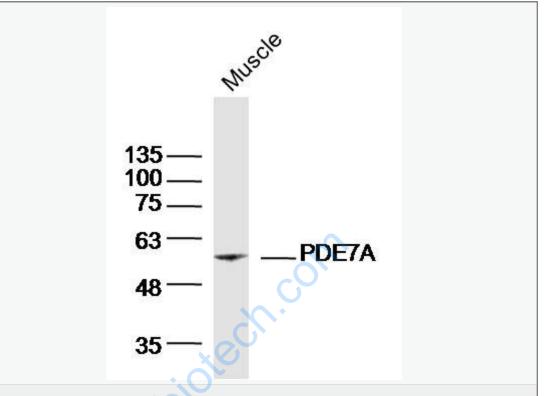
Unigene: 527119Human

Unigene: 728847Human

Important Note:

This product as supplied is intended for research use only, not for use in human,





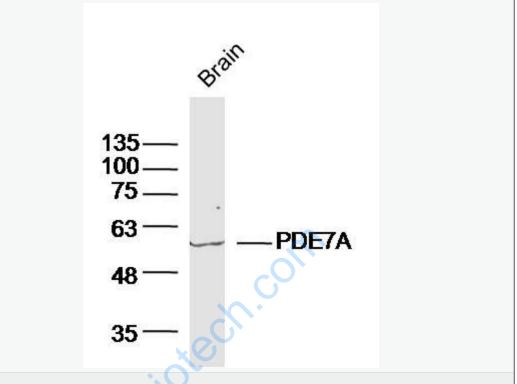
Sample: Muscle (Mouse)Lysate at 40 ug

Primary: Anti-PDE7A(SL11575R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution

Predicted band size: 55kD

Observed band size: 55kD



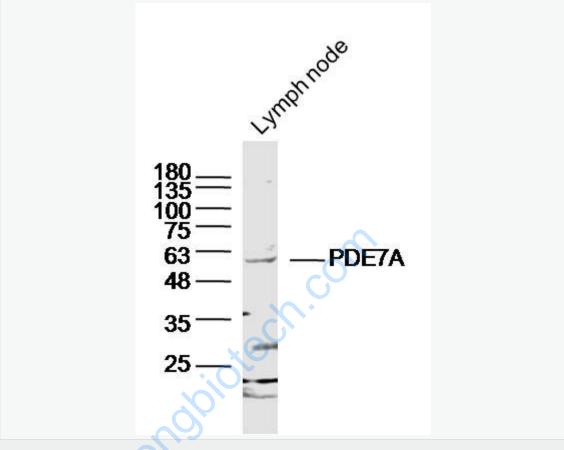
Sample:Brain (Mouse)Lysate at 40 ug

Primary: Anti-PDE7A(SL11575R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution

Predicted band size: 55kD

Observed band size: 55kD



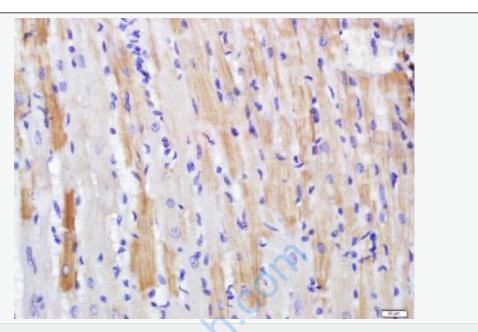
Sample: Lymph node (Mouse) Lysate at 40 ug

Primary: Anti-PDE7A (SL11575R) at 1/300 dilution

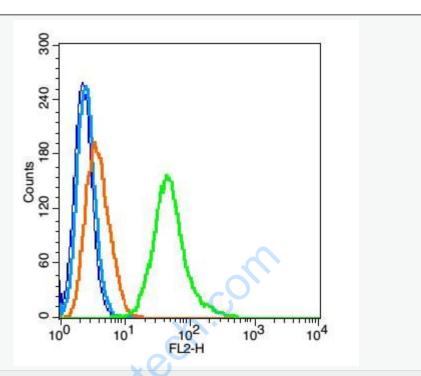
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55kD

Observed band size: 55kD



Paraformaldehyde-fixed, paraffin embedded (rat heart); 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 (PDE7A) Polyclonal Antibody, Unconjugated (SL11575R) 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- PDE7A antibody(SL11575R), Dilution: $1\mu g$ in 100 μL 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.