



# PDE7A Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-05637
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	PDE7A
<b>Protein Name</b>	High affinity cAMP-specific 3',5'-cyclic phosphodiesterase 7A (EC 3.1.4.17) (HCP1) (TM22)
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein
<b>Specificity</b>	PDE7A Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	53kD
<b>Cell Pathway</b>	[Isoform PDE7A1]: Cytoplasm, cytosol . PDE7A1 (57 kDa) is located mostly to soluble cellular fractions. . ; [Isoform PDE7A2]: Cytoplasm . PDE7A2 (50 kDa) is located to particulate cellular fractions. .
<b>Tissue Specificity</b>	[Isoform PDE7A1]: Found at high levels in skeletal muscle and at low levels in a variety of tissues including brain and heart (PubMed:9195912). It is expressed as well in two T-cell lines (PubMed:9195912). . ; [Isoform PDE7A2]: Found abundantly in skeletal muscle and at low levels in heart.
<b>Function</b>	catalytic activity:Adenosine 3',5'-cyclic phosphate + H(2)O = adenosine 5'-phosphate.,cofactor:Divalent cations.,developmental stage:Developmentally regulated. PDE7A1 and PDE7A2 are found in several fetal tissues, expression is reduced throughout development. It persists strongly only in adult skeletal muscle.,domain:Composed of a C-terminal catalytic domain containing two putative divalent metal sites and an N-terminal regulatory domain.,enzyme regulation:Insensitive to all selective PDE inhibitors.,function:Plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides. This phosphodiesterase is highly specific for cAMP and may have a role in muscle signal transduction.,pathway:Purine metabolism; cAMP degradation; AMP from cAMP: step 1/1.,similarity:Belongs to the cyclic nucleotide phosphodiesterase family.,subcellular location:PDE7A1 (57 kDa) i

**Background**

The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE7 subfamily. This PDE hydrolyzes the second messenger, cAMP, which is a regulator and mediator of a number of cellular responses to extracellular signals. Thus, by regulating the cellular concentration of cAMP, this protein plays a key role in many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2011],

**matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**