



# PDE4D rabbit pAb

<b>Catalog No</b>	YP-Ab-12559
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human; Mouse;Rat
<b>Applications</b>	WB
<b>Gene Name</b>	PDE4D DPDE3
<b>Protein Name</b>	PDE4D
<b>Immunogen</b>	Synthesized peptide derived from human PDE4D
<b>Specificity</b>	This antibody detects endogenous levels of PDE4D at Human, Mouse,Rat
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.50% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB 1:500-2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	cAMP-specific 3',5'-cyclic phosphodiesterase 4D (EC 3.1.4.17) (DPDE3) (PDE43)
<b>Observed Band</b>	isform D3:76kD, isform D4 91kD, isform D1 D2 66kD
<b>Cell Pathway</b>	Apical cell membrane . Cytoplasm . Membrane . Cytoplasm, cytoskeleton . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Found in the soluble fraction, associated with membranes, and associated with the cytoskeleton and the centrosome (By similarity). Colocalized with SHANK2 to the apical membrane of colonic crypt cells. .
<b>Tissue Specificity</b>	Expressed in colonic epithelial cells (at protein level). Widespread; most abundant in skeletal muscle. ; [Isoform 6]: Detected in brain. ; [Isoform 8]: Detected in brain, placenta, lung and kidney. ; [Isoform 7]: Detected in heart and skeletal muscle.
<b>Function</b>	catalytic activity:Adenosine 3',5'-cyclic phosphate + H(2)O = adenosine 5'-phosphate.;cofactor:Binds 2 divalent metal cations per subunit. Site 1 may preferentially bind zinc ions, while site 2 has a preference for magnesium and/or manganese ions.;disease:Genetic variations in PDE4D might be associated with susceptibility to stroke type 1 (STRK1) [MIM:606799]. A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. PubMed:17006457 states that association with stroke has to be considered with caution.;enzyme regulation:Inhibited by rolipram. Activated by phosphatidic acid.;function:Regulates the levels of cAMP in the cell.;pathway:Purine metabolism; cAMP degradation; AMP from cAMP: step 1/1.;PTM:Isoform 2 and

isoform 11 are activated by phosphorylation (in vitro), but not isoform 8. Isoform 7 a

**Background**

This gene encodes one of four mammalian counterparts to the fruit fly *dunce* gene. The encoded protein has 3',5'-cyclic-AMP phosphodiesterase activity and degrades cAMP, which acts as a signal transduction molecule in multiple cell types. This gene uses different promoters to generate multiple alternatively spliced transcript variants that encode functional proteins.[provided by RefSeq, Sep 2009],

**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