Best Tools for immunology Research

PDE4D (Phospho Ser578) rabbit pAb

Catalog No :	YP1787
Reactivity :	Human;Mouse;Rat
Applications :	WB
Target :	PDE4D
Fields :	>>Purine metabolism;>>Metabolic pathways;>>cAMP signaling pathway;>>Parathyroid hormone synthesis, secretion and action;>>Morphine addiction
Gene Name :	PDE4D DPDE3
Protein Name :	PDE4D (Phospho-Ser578)
Human Gene Id :	5144
Human Swiss Prot No :	Q08499
Mouse Gene Id :	238871
Mouse Swiss Prot No :	Q01063
Rat Gene Id :	24627
Rat Swiss Prot No :	P14270
Immunogen :	Synthesized peptide derived from human PDE4D (Phospho-Ser578)
Specificity :	This antibody detects endogenous levels of PDE4D (Phospho-Ser578) at Human, Mouse,Rat
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500-2000

Purification : The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 76kD

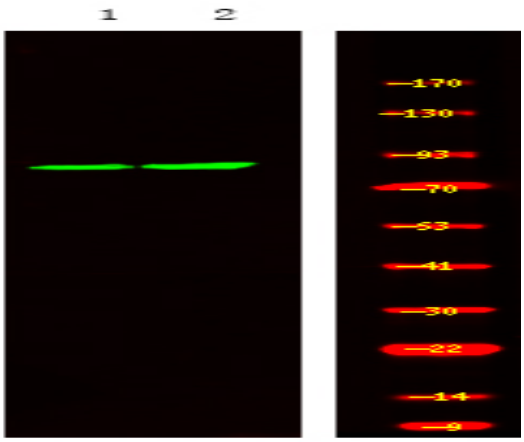
Background : This gene encodes one of four mammalian counterparts to the fruit fly 'dunce' gene. The encoded protein has 3',5'-cyclic-AMP phosphodiesterase activity and degrades cAMP, which acts as a signal transduction molecule in multiple cell types. This gene uses different promoters to generate multiple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

Function : 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

Subcellular Location : 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. .

Expression : 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.

Products Images



Western Blot analysis of K-562 cell, 2, LPS 100ng/mL 30min treated ,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000