

OriGene Technologies, Inc.

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Product datasheet for TA503471

PDE4 (PDE4B) Mouse Monoclonal Antibody [Clone ID: OTI1D12]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1D12

Applications: FC, IF, IHC, WB

Recommend Dilution: WB 1:500~2000, IHC 1:150, IF 1:100, FLOW 1:100

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PDE4B(NP_002591) produced in HEK293T

cell

Formulation: PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 0.62 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 83.2 kDa

Gene Name: phosphodiesterase 4B

Database Link: NP 002591 Entrez Gene 18578 MouseEntrez Gene 5142 Human

Background: This gene is a member of the type IV, cyclic AMP (cAMP)-specific, cyclic nucleotide

phosphodiesterase (PDE) family. Cyclic nucleotides are important second messengers that regulate and mediate a number of cellular responses to extracellular signals, such as hormones, light, and neurotransmitters. The cyclic nucleotide phosphodiesterases (PDEs) regulate the cellular concentrations of cyclic nucleotides and thereby play a role in signal transduction. This gene encodes a protein that specifically hydrolyzes cAMP. Altered activity of this protein has been associated with schizophrenia and bipolar affective disorder.

Alternate transcriptional splice variants, encoding different isoforms, have been

characterized. [provided by RefSeq, Jul 2008]

Synonyms: DPDE4; PDE4B5; PDEIVB

Protein Families: Druggable Genome

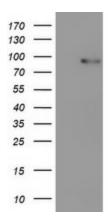




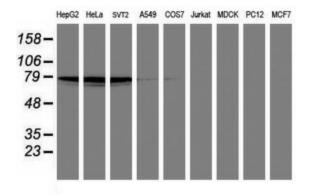
Protein Pathways:

Progesterone-mediated oocyte maturation, Purine metabolism

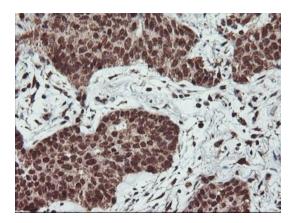
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PDE4B ([RC211956], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDE4B. Positive lysates [LY400919] (100ug) and [LC400919] (20ug) can be purchased separately from OriGene.

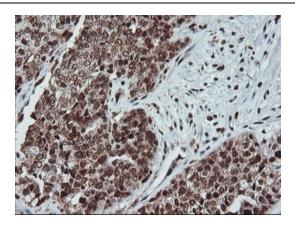


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PDE4B monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

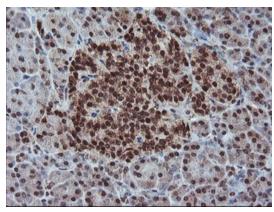


Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-PDE4B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA503471)

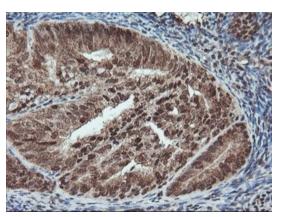




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-PDE4B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA503471)

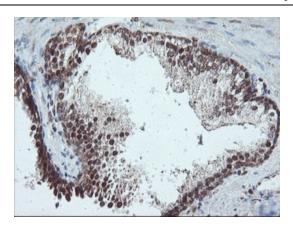


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-PDE4B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA503471)

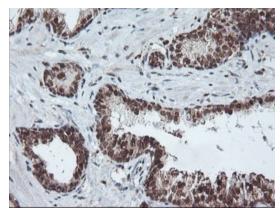


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-PDE4B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA503471)

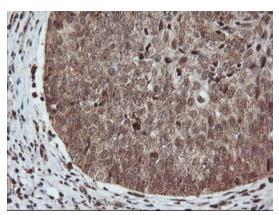




Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-PDE4B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA503471)

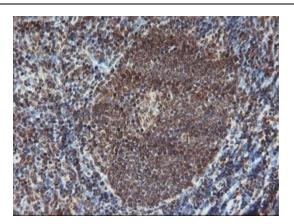


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-PDE4B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA503471)

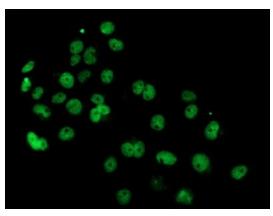


Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-PDE4B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA503471)

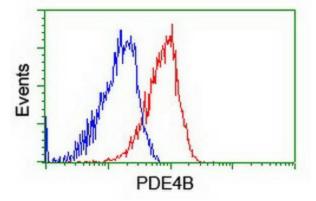




Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-PDE4B mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA503471)

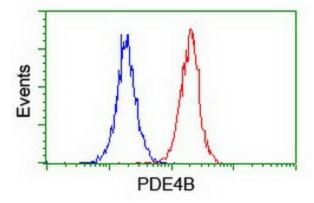


Anti-PDE4B mouse monoclonal antibody (TA503471) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PDE4B ([RC211956]).



Flow cytometric Analysis of Hela cells, using anti-PDE4B antibody (TA503471), (Red), compared to a nonspecific negative control antibody, (Blue).





Flow cytometric Analysis of Jurkat cells, using anti-PDE4B antibody (TA503471), (Red), compared to a nonspecific negative control antibody, (Blue).