

# Product datasheet for TA503471M

### OriGene Technologies, Inc.

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

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1D12

**Applications:** FC, IF, IHC, WB

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

Reactivity: Human, Mouse, Rat

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)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 83.2 kDa

**Gene Name:** phosphodiesterase 4B

Database Link: NP 002591

Entrez Gene 18578 MouseEntrez Gene 24626 RatEntrez Gene 5142 Human

007343





#### Background:

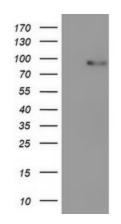
This gene is a member of the type IV, cyclic AMP (cAMP)-specific, cyclic nucleotide phosphodiesterase (PDE) family. Cyclic nucleotides are important second messengers that regulate and mediate a number of cellular responses to extracellular signals, such as hormones, light, and neurotransmitters. The 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 (Cat# [PS100001], Left lane) or pCMV6-ENTRY PDE4B (Cat# [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(Cat# [TA503471]). Positive lysates [LY400919] (100ug) and [LC400919] (20ug) can be purchased separately from OriGene.

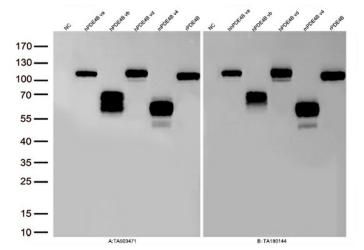
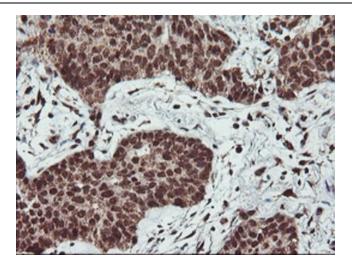
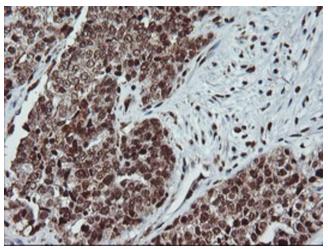


Figure A, Western blot analysis of overexpressed lysates(15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], NC), human PDE4B va plasmid ([RC211956], hPDE4B va), human PDE4B vb plasmid ([RC218324], hPDE4B vb), human PDE4B vd plasmid ([RC210912], hPDE4B vd), mouse PDE4B v4 plasmid ([MR208078], mPDE4B v4), rat PDE4B plasmid ([RR205789], rPDE4B) using anti-PDE4B antibody [TA503471] (1:500). Figure B, Western blot analysis of the same samples as figure A with anti-DDK antibody ([TA180144], 1:1000)

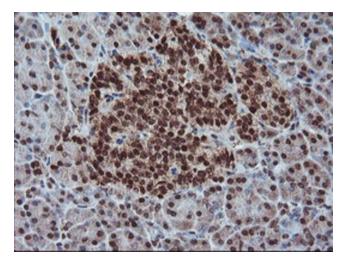




Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

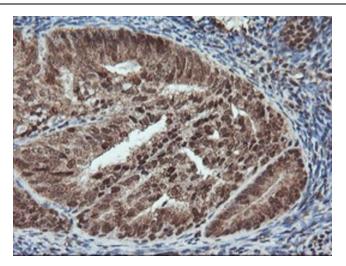


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

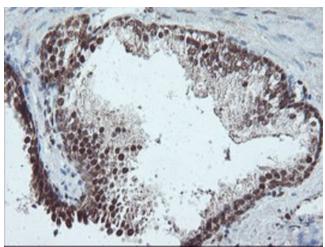


Immunohistochemical staining of paraffinembedded Human pancreas tissue within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

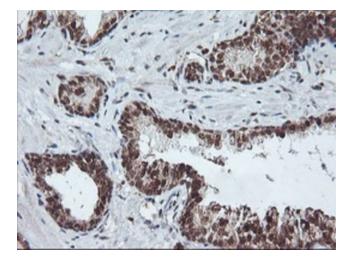




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

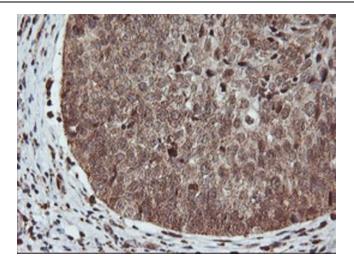


Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

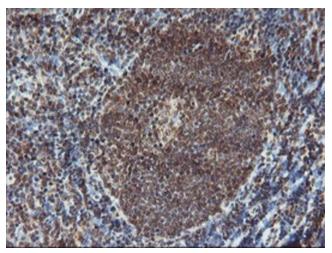


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

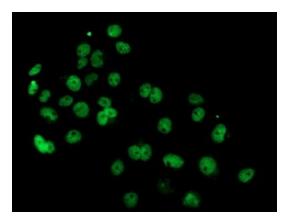




Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

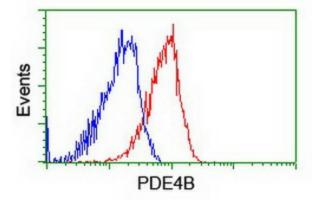


Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

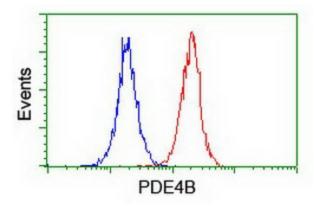


Anti-PDE4B mouse monoclonal antibody ([TA503471]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PDE4B ([RC211956]).





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).