

Product datasheet for **CF503471**

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:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
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 Mouse Entrez Gene 24626 Rat Entrez Gene 5142 Human Q07343



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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

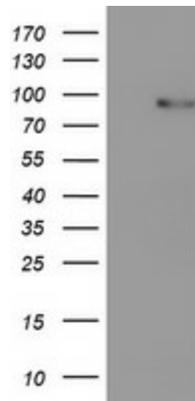
Protein Families:

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.

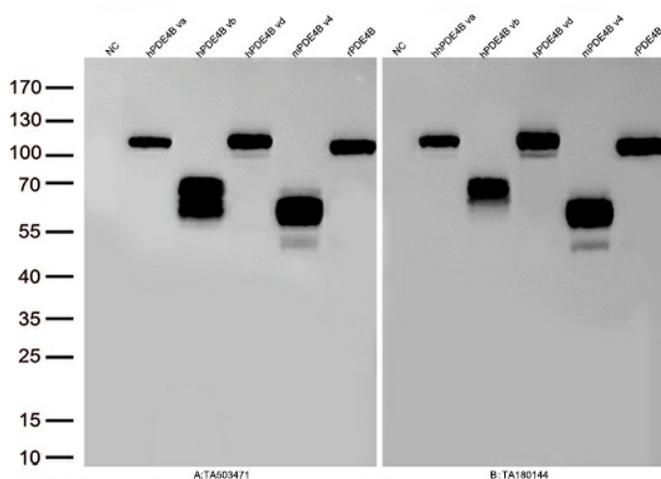
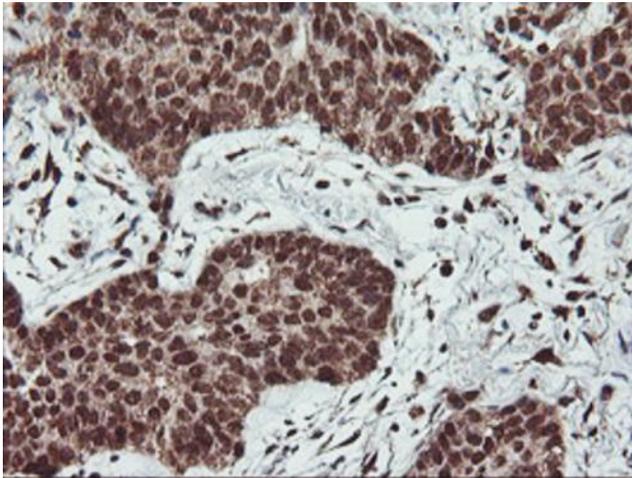
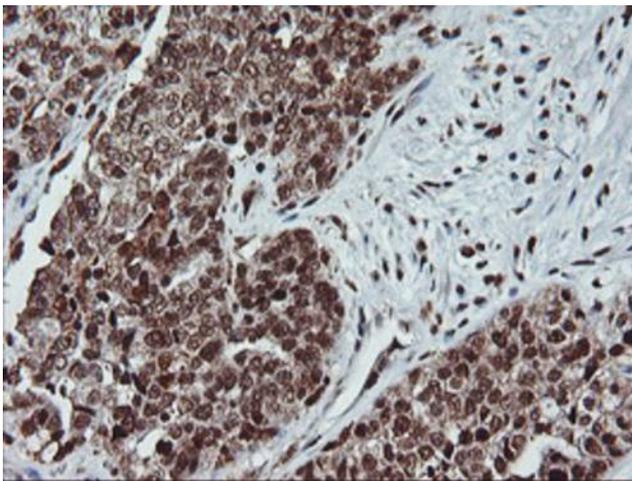


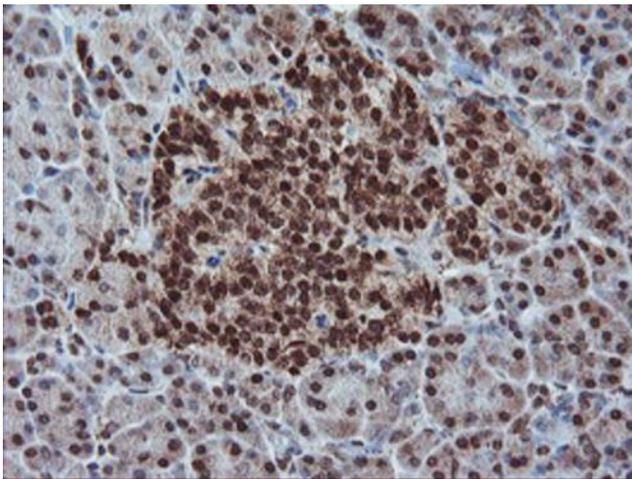
Figure A, Western blot analysis of overexpressed lysates(15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], NC) , human PDE4B va plasmid ([RC211956], hPDE4B va), human PDE4B vb plasmid ([RC218324], hPDE4B vb), human PDE4B vd plasmid ([RC210912], hPDE4B vd), mouse PDE4B v4 plasmid ([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)



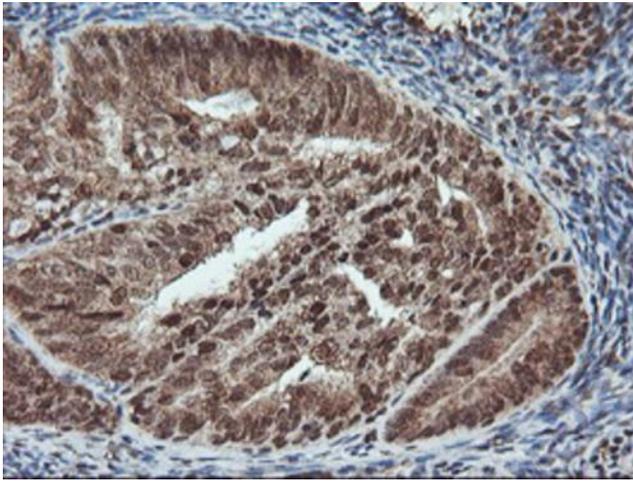
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



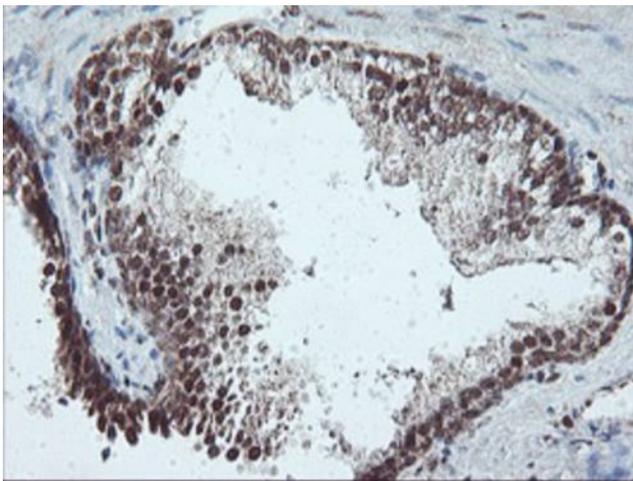
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



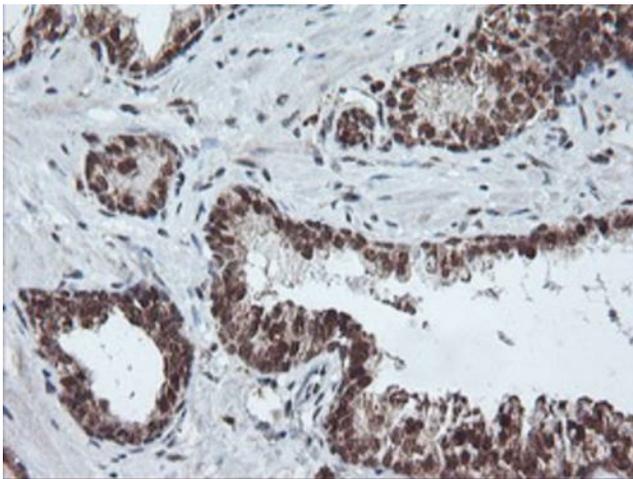
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



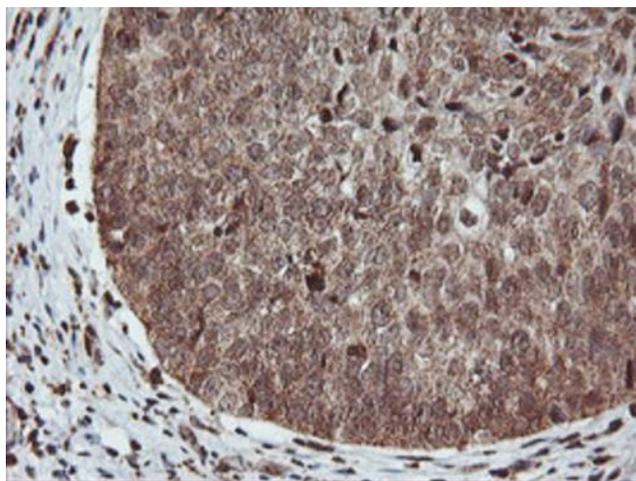
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



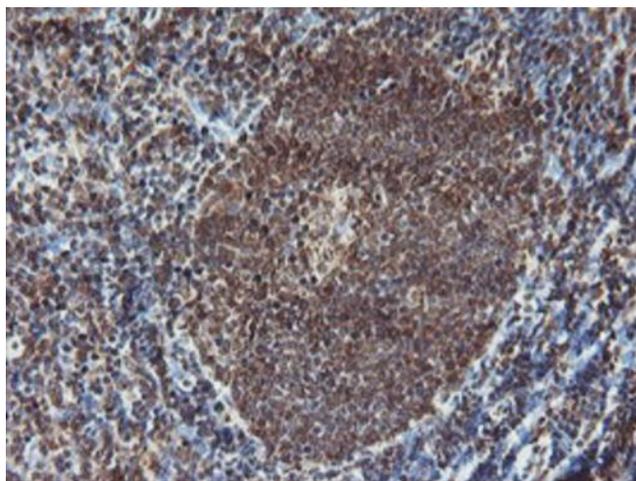
Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



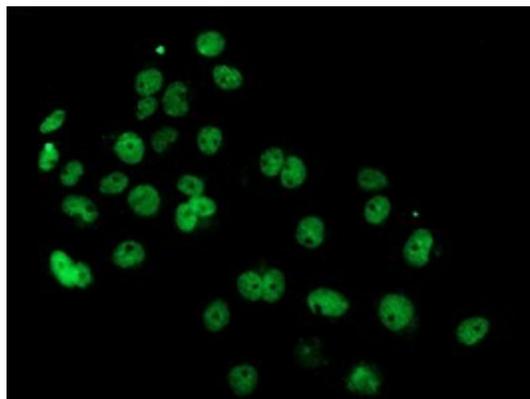
Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



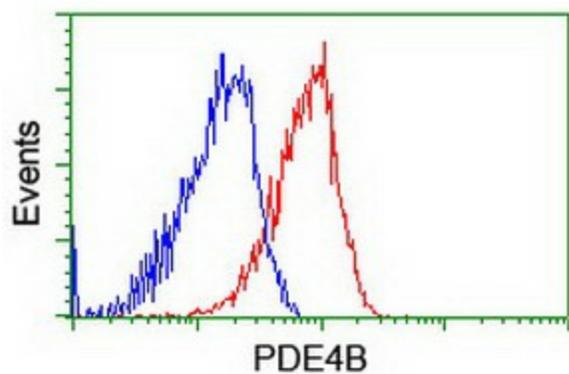
Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



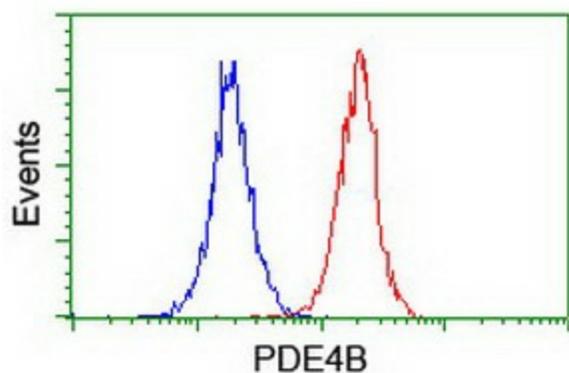
Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



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).