

## Product datasheet for **TA503471**

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

#### **Product data:**

|                                |   |
|--------------------------------|---|
| <b>Product Type:</b>           | Primary Antibodies  |
| <b>Clone Name:</b>             | OTI1D12   |
| <b>Applications:</b>           | FC, IF, IHC, WB   |
| <b>Recommended Dilution:</b>   | WB 1:500~2000, IHC 1:150, IF 1:100, FLOW 1:100  |
| <b>Reactivity:</b>             | Human, Mouse, Rat   |
| <b>Host:</b>                   | Mouse   |
| <b>Isotype:</b>                | IgG1  |
| <b>Clonality:</b>              | Monoclonal  |
| <b>Immunogen:</b>              | Full length human recombinant protein of human PDE4B(NP_002591) produced in HEK293T cell.   |
| <b>Formulation:</b>            | PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.  |
| <b>Concentration:</b>          | 0.62 mg/ml  |
| <b>Purification:</b>           | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)   |
| <b>Conjugation:</b>            | Unconjugated  |
| <b>Storage:</b>                | Store at -20°C as received.   |
| <b>Stability:</b>              | Stable for 12 months from date of receipt.  |
| <b>Predicted Protein Size:</b> | 83.2 kDa  |
| <b>Gene Name:</b>              | phosphodiesterase 4B  |
| <b>Database Link:</b>          | <a href="#">NP_002591</a><br><a href="#">Entrez Gene 18578 Mouse</a> <a href="#">Entrez Gene 24626 Rat</a> <a href="#">Entrez Gene 5142 Human</a><br><a href="#">Q07343</a> |



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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:**

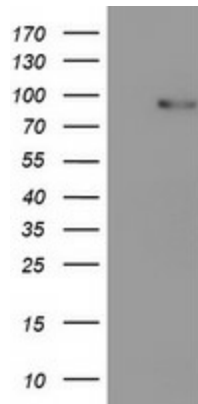
DPDE4; PDE4B5; PDEIVB

**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.

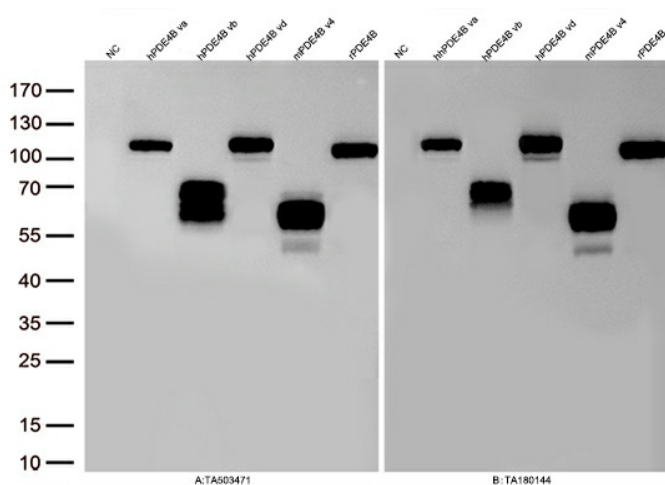
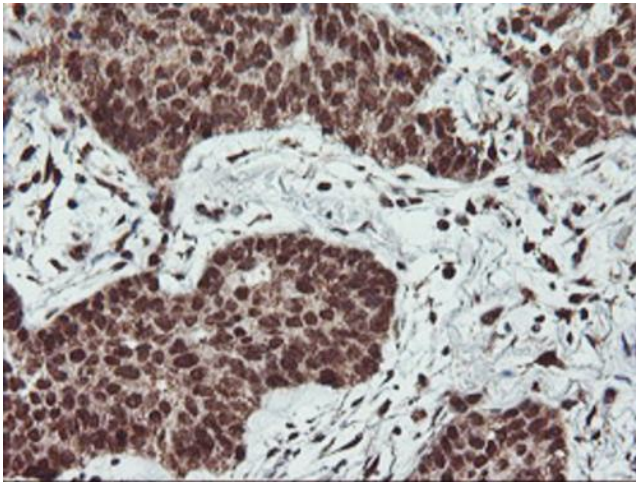
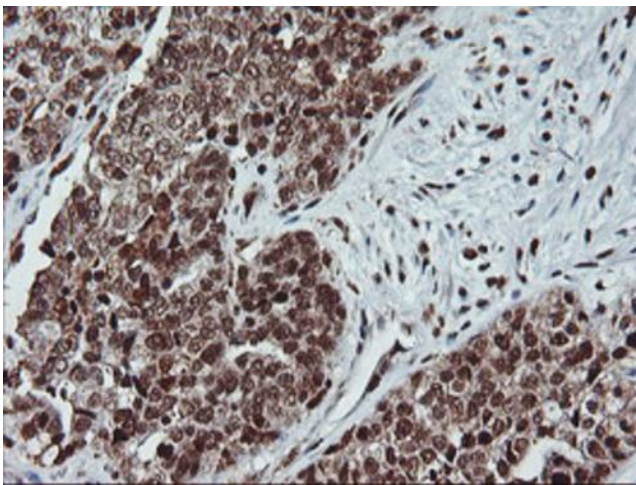


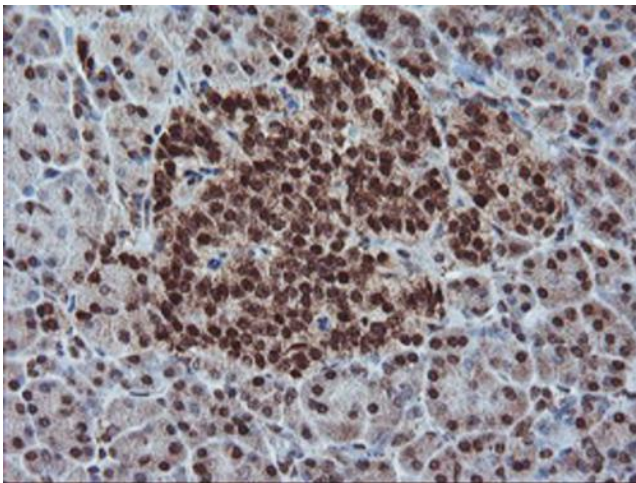
Figure A, Western blot analysis of overexpressed lysates (15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], NC), human PDE4B va plasmid ([RC211956], hPDE4B va), human PDE4B vb plasmid ([RC218324], hPDE4B vb), human PDE4B vd plasmid ([RC210912], hPDE4B vd), mouse PDE4B v4 plasmid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



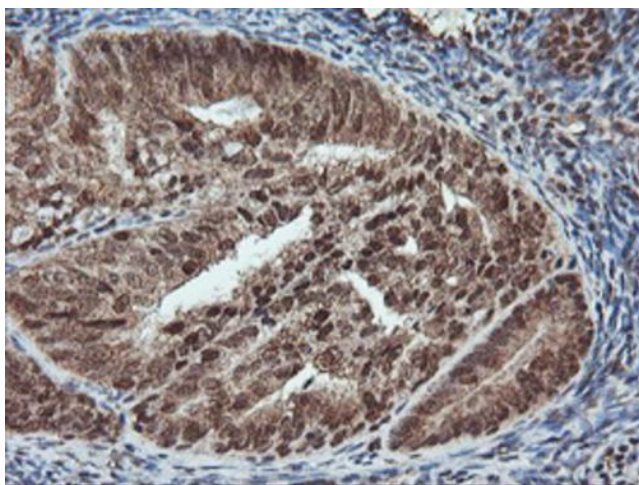
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



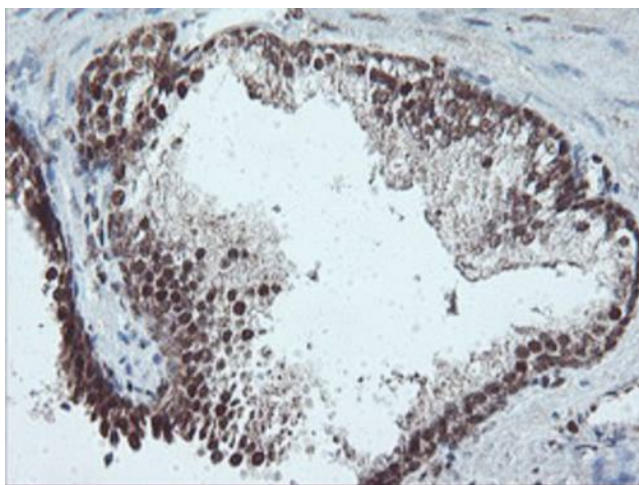
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



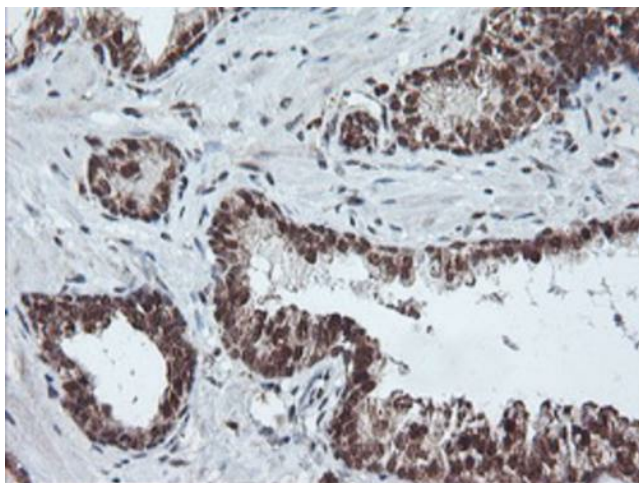
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



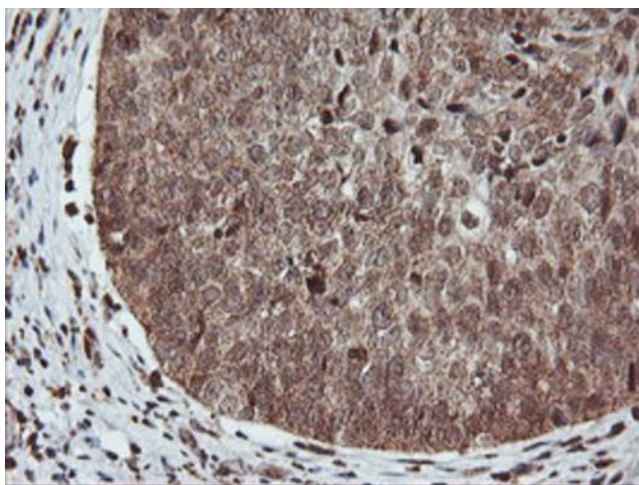
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human endometrium tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



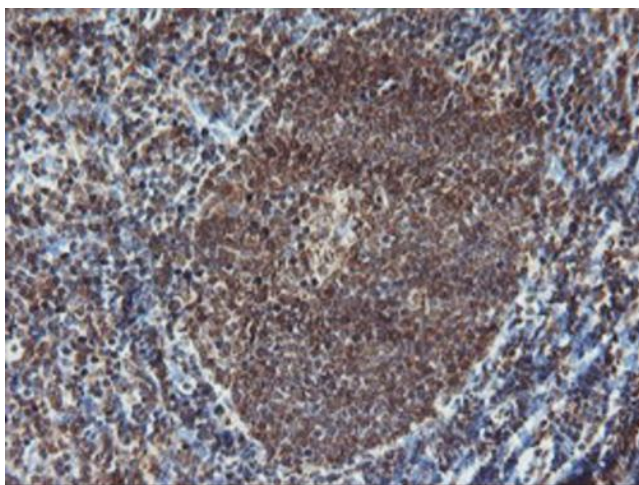
Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



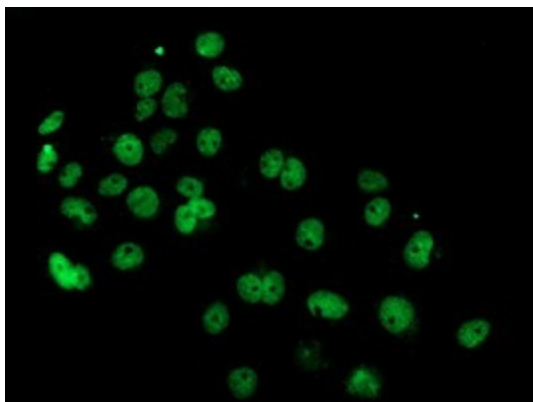
Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



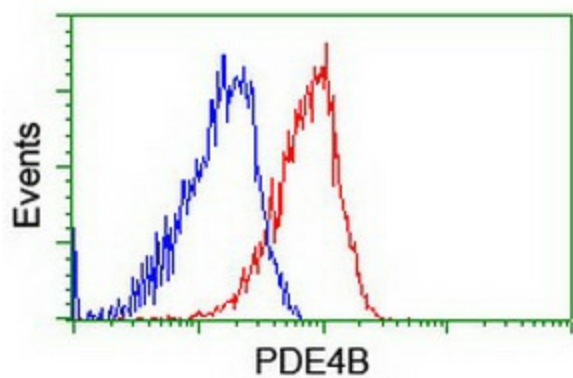
Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



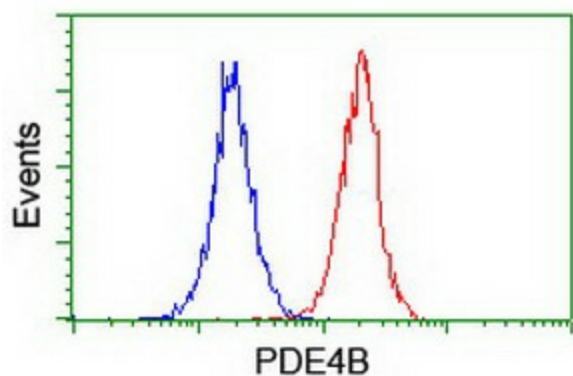
Immunohistochemical staining of paraffin-embedded Human tonsil within the normal limits using anti-PDE4B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



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).