

**PDE1B Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2281a****Specification****PDE1B Antibody - Product Information**

Application	WB, IHC, FC, E
Primary Accession	<a href="#">Q01064</a>
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	61.4kDa KDa

**Description**

The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE1 subfamily. Members of the PDE1 family are calmodulin-dependent PDEs that are stimulated by a calcium-calmodulin complex. This PDE has dual-specificity for the second messengers, cAMP and cGMP, with a preference for cGMP as a substrate. cAMP and cGMP function as key regulators of many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene.

**Immunogen**

Purified recombinant fragment of human PDE1B (AA: 370-536) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**PDE1B Antibody - Additional Information**

**Gene ID** 5153

**Other Names**

Calcium/calmodulin-dependent 3', 5'-cyclic nucleotide phosphodiesterase 1B, Cam-PDE 1B, 3.1.4.17, 63 kDa Cam-PDE, PDE1B, PDE1B1, PDES1B

**Dilution**

WB~~1/500 - 1/2000  
IHC~~1/200 - 1/1000  
FC~~1/200 - 1/400  
E~~1/10000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PDE1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## PDE1B Antibody - Protein Information

**Name** PDE1B ([HGNC:8775](#))

**Synonyms** PDES1B

### Function

Cyclic nucleotide phosphodiesterase with a dual specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes (PubMed:<a href="http://www.uniprot.org/citations/15260978" target="\_blank">15260978</a>, PubMed:<a href="http://www.uniprot.org/citations/8855339" target="\_blank">8855339</a>, PubMed:<a href="http://www.uniprot.org/citations/9419816" target="\_blank">9419816</a>). Has a preference for cGMP as a substrate (PubMed:<a href="http://www.uniprot.org/citations/9419816" target="\_blank">9419816</a>).

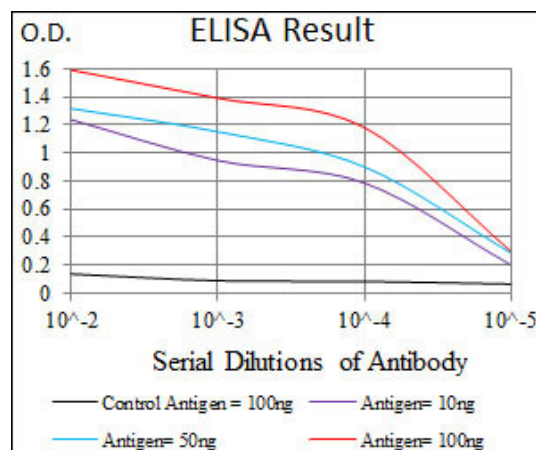
### Cellular Location

Cytoplasm, cytosol.

## PDE1B Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



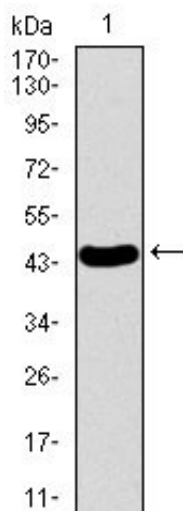


Figure 1: Western blot analysis using PDE1B mAb against human PDE1B recombinant protein. (Expected MW is 44.4 kDa)

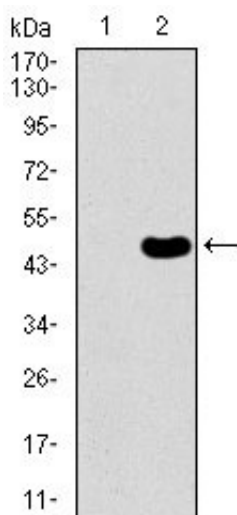


Figure 2: Western blot analysis using PDE1B mAb against HEK293 (1) and PDE1B (AA: 370-536)-hlgGfc transfected HEK293 (2) cell lysate.

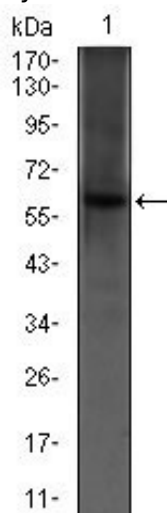


Figure 3: Western blot analysis using PDE1B mouse mAb against PC-12 (1) cell lysate.

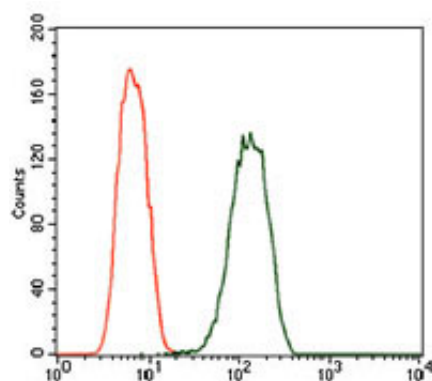


Figure 4: Flow cytometric analysis of A549 cells using PDE1B mouse mAb (green) and negative control (red).

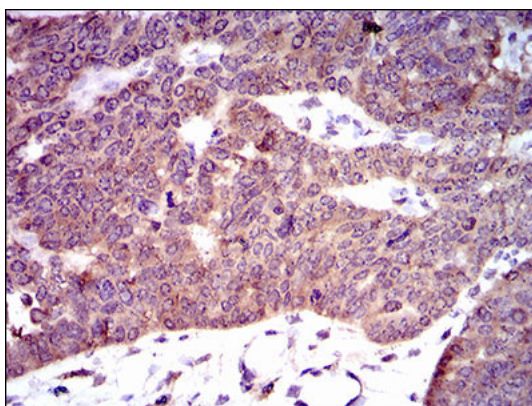


Figure 5: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using PDE1B mouse mAb with DAB staining.

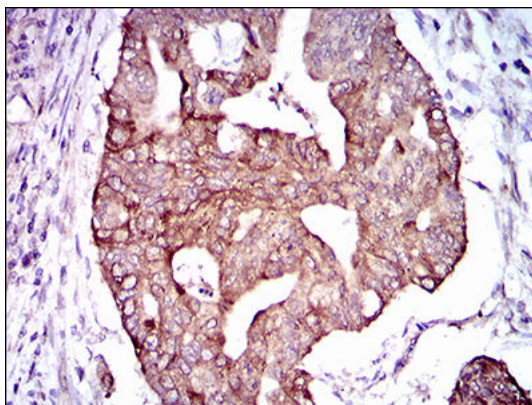


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using PDE1B mouse mAb with DAB staining.

#### **PDE1B Antibody - References**

1. J Biol Chem. 2007 Nov 9;282(45):32749-57. 2. Proc Natl Acad Sci U S A. 2005 Jan 11;102(2):497-502.