

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

Application	E, WB, FC, IHC
Primary Accession	Q01064
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

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

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:8855339, PubMed:9419816, PubMed:15260978). Has a preference for cGMP as a substrate (PubMed:9419816).

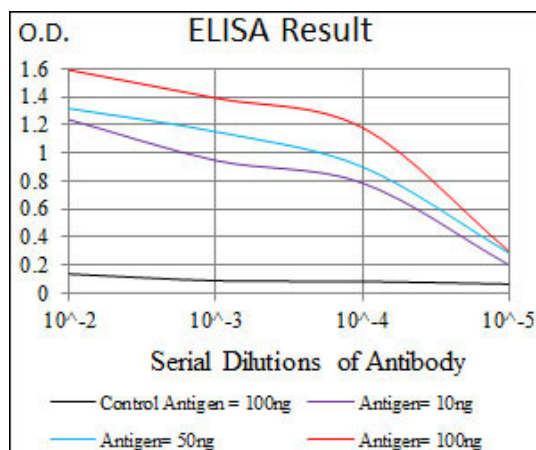
Cellular Location

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](#)



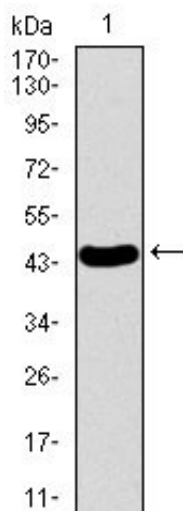


Figure 1: Western blot analysis using PDE1B mAb against human PDE1B recombinant protein. (Expected MW is 44.4 kDa)

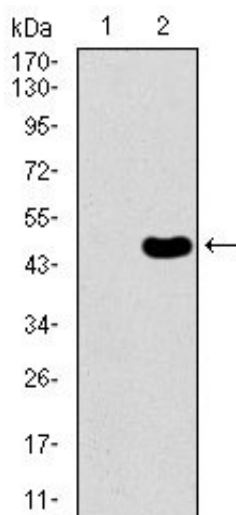


Figure 2: Western blot analysis using PDE1B mAb against HEK293 (1) and PDE1B (AA: 370-536)-hlgGfC transfected HEK293 (2) cell lysate.

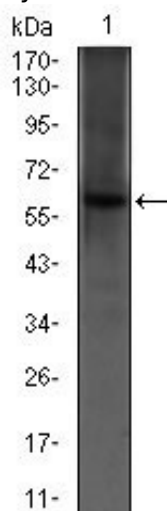


Figure 3: Western blot analysis using PDE1B mouse mAb against PC-12 (1) cell lysate.

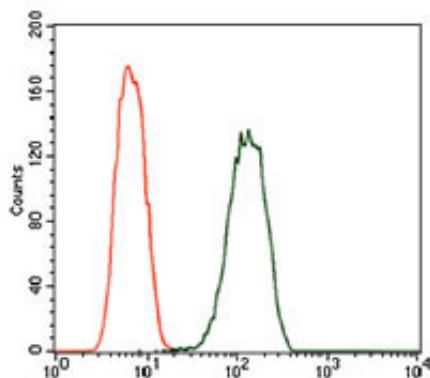


Figure 4: Flow cytometric analysis of A549 cells using PDE1B mouse mAb (green) and negative control (red).

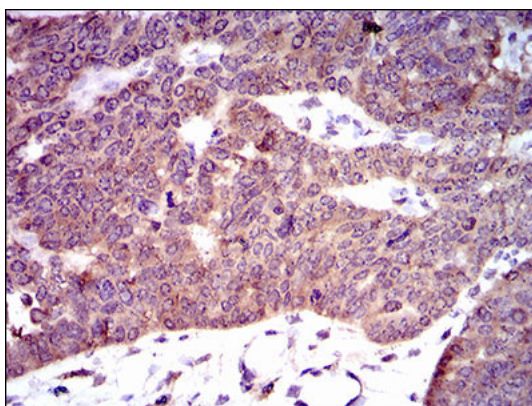


Figure 5: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using PDE1B mouse mAb with DAB staining.

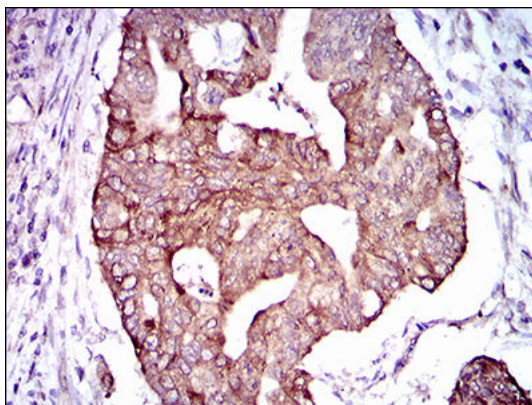


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using PDE1B mouse mAb with DAB staining.

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.