

# PDE1B Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO2282a

## Product Information

---

<b>Application</b>	WB, FC, E
<b>Primary Accession</b>	<a href="#">Q01064</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone Names</b>	10B10B12
<b>Isotype</b>	IgG1
<b>Calculated MW</b>	61380
<b>Description</b>	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.
<b>Immunogen</b>	Purified recombinant fragment of human PDE1B (AA: 370-536) expressed in E. Coli.
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide.

## Additional Information

---

<b>Gene ID</b>	5153
<b>Other Names</b>	Calcium/calmodulin-dependent 3', 5'-cyclic nucleotide phosphodiesterase 1B, Cam-PDE 1B, 3.1.4.17, 63 kDa Cam-PDE, PDE1B, PDE1B1, PDES1B
<b>Dilution</b>	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000
<b>Storage</b>	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.
<b>Precautions</b>	PDE1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

<b>Name</b>	PDE1B ( <a href="#">HGNC:8775</a> )
-------------	-------------------------------------

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

**Cellular Location**

Cytoplasm, cytosol.

**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.

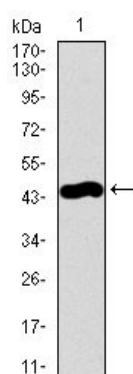
**Images**

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

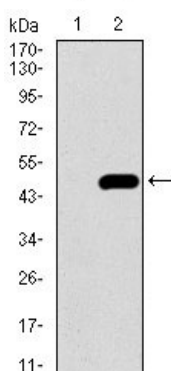


Figure 2: Western blot analysis using PDE1B mAb against HEK293 (1) and PDE1B (AA: 370-536)-hIgGFc transfected HEK293 (2) cell lysate.

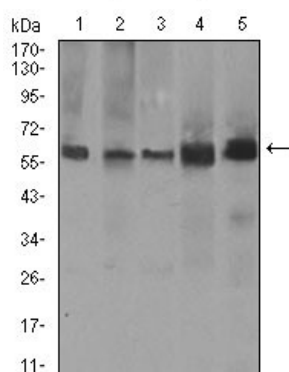
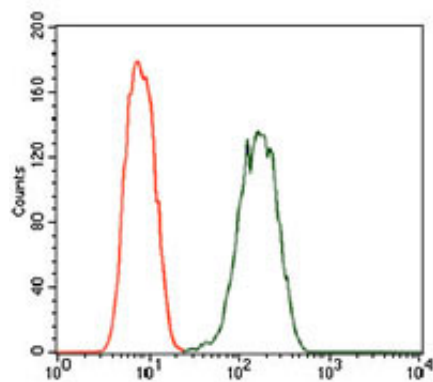


Figure 3: Western blot analysis using PDE1B mouse mAb against A549 (1), SK-MES-1 (2), PC-12 (3), NIH3T3 (4), and 3T3-L1 (5) cell lysate.

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.