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PDE1B Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2281a

Product Information

Application	WB, IHC, FC, E
Primary Accession	Q01064
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Clone Names	5C4A3
Isotype	IgG1
Calculated MW	61380
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

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.

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: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

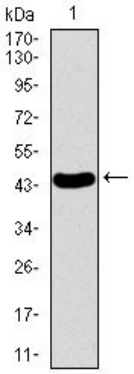


Figure 1: Western blot analysis using PDE1B mAb against human PDE1B recombinant protein. (Expected MW is 44.4 kDa)

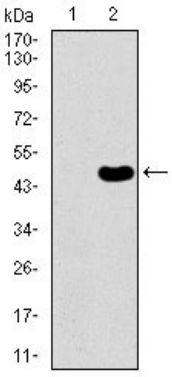


Figure 2: Western blot analysis using PDE1B mAb against HEK293 (1) and PDE1B (AA: 370-536)-hIgGFc transfected HEK293 (2) cell lysate.

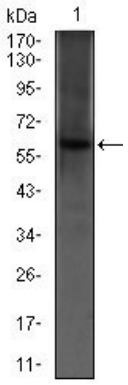
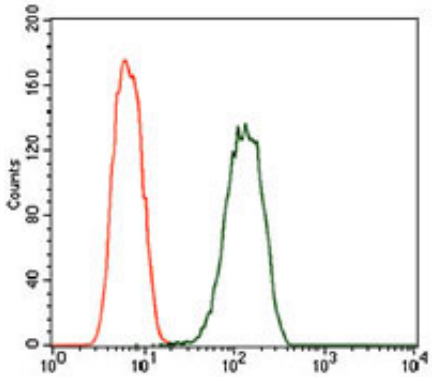


Figure 3: Western blot analysis using PDE1B mouse mAb against PC-12 (1) cell lysate.

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



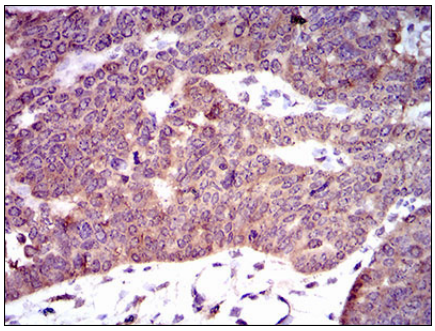


Figure 5: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using PDE1B mouse mAb with DAB staining.

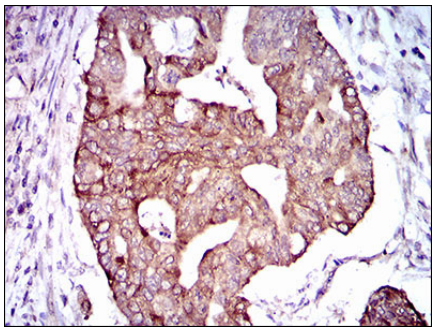


Figure 6: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using PDE1B mouse mAb with DAB staining.

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