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PDE1B Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11846B

Product Information

Application	WB, IHC-P, E
Primary Accession	Q01064
Other Accession	NP_000915.1, NP_001159447.1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31387
Calculated MW	61380
Antigen Region	473-500

Additional Information

Gene ID	5153
Other Names	Calcium/calmodulin-dependent 3', 5'-cyclic nucleotide phosphodiesterase 1B, Cam-PDE 1B, 63 kDa Cam-PDE, PDE1B, PDE1B1, PDES1B
Target/Specificity	This PDE1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 473-500 amino acids from the C-terminal region of human PDE1B.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PDE1B Antibody (C-term) 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.

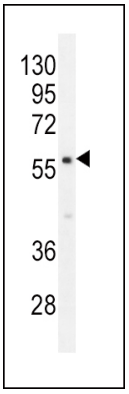
Background

Cyclic nucleotide phosphodiesterases (PDEs) catalyze hydrolysis of the cyclic nucleotides cAMP and cGMP to the corresponding nucleoside 5-prime-monophosphates. Mammalian PDEs have been classified into several families based on their biochemical properties. Members of the PDE1 family, such as PDE1B, are calmodulin (see MIM 114180)-dependent PDEs (CaM-PDEs) that are stimulated by a calcium-calmodulin complex (Repaske et al., 1992 [PubMed 1326532]).

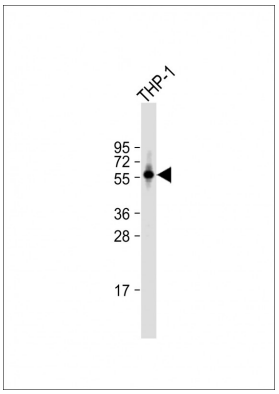
References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Vandeput, F., et al. J. Biol. Chem. 282(45):32749-32757(2007)
Bender, A.T., et al. Proc. Natl. Acad. Sci. U.S.A. 103(2):460-465(2006)
Bender, A.T., et al. Proc. Natl. Acad. Sci. U.S.A. 102(2):497-502(2005)

Images

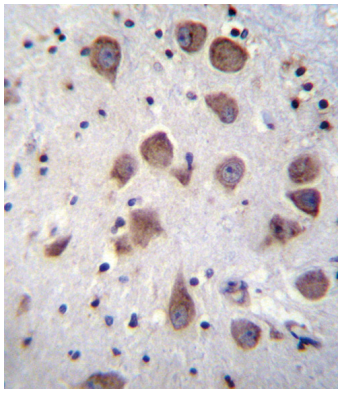


PDE1B Antibody (C-term) (Cat. #AP11846b) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the PDE1B antibody detected the PDE1B protein (arrow).



Anti-PDE1B Antibody (C-term) at 1:1000 dilution + THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 61 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

PDE1B Antibody (C-term) (Cat. #AP11846b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the



use of PDE1B Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.