

Product datasheet for CF503319

OriGene Technologies, Inc.

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PDE1B Mouse Monoclonal Antibody [Clone ID: OTI6E4]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI6E4

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:2000, IHC 1:150, IF 1:100, FLOW 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG2b

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human PDE1B(NP_000915) produced in HEK293T

cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 61.2 kDa

Gene Name: phosphodiesterase 1B

Database Link: NP 000915

Entrez Gene 18574 MouseEntrez Gene 29691 RatEntrez Gene 5153 Human

Q01064





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

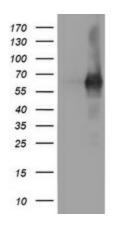
[PubMed 1326532]). [supplied by OMIM]

Synonyms: PDE1B1; PDES1B

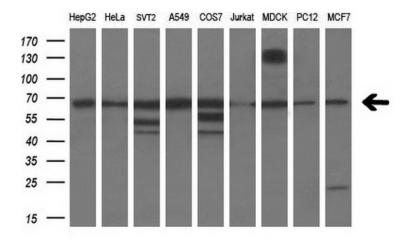
Protein Families: Druggable Genome

Protein Pathways: Calcium signaling pathway, Progesterone-mediated oocyte maturation, Purine metabolism

Product images:

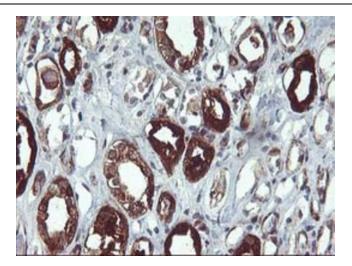


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PDE1B (Cat# [RC206588], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDE1B(Cat# [TA503319]). Positive lysates [LY400337] (100ug) and [LC400337] (20ug) can be purchased separately from OriGene.

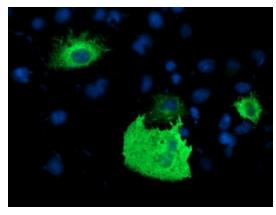


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-PDE1B monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:200).

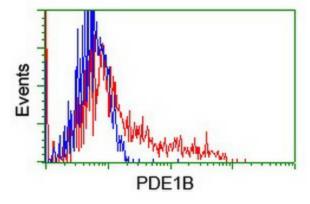




Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-PDE1B mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

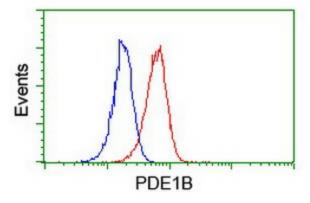


Anti-PDE1B mouse monoclonal antibody ([TA503319]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PDE1B ([RC206588]).



HEK293T cells transfected with either [RC206588] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PDE1B antibody ([TA503319]), and then analyzed by flow cytometry.





Flow cytometric Analysis of Jurkat cells, using anti-PDE1B antibody ([TA503319]), (Red), compared to a nonspecific negative control antibody, (Blue).