

Anti-PDE4B/C/D Antibody

Catalog # AP53693

Product Information

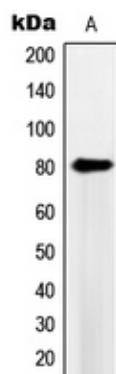
Application	WB, IHC, IF/IC
Primary Accession	Q07343
Other Accession	Q08493 , Q08499
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	83343

Additional Information

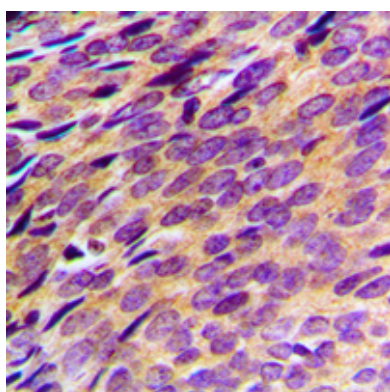
Gene ID	5142
Other Names	PDE4B; DPDE4; cAMP-specific 3', 5'-cyclic phosphodiesterase 4B; DPDE4; PDE32; PDE4C; DPDE1; cAMP-specific 3', 5'-cyclic phosphodiesterase 4C; DPDE1; PDE21; PDE4D; DPDE3; cAMP-specific 3', 5'-cyclic phosphodiesterase 4D; DPDE3; PDE43
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PDE4B/C/D. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1/50 - 1/200 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

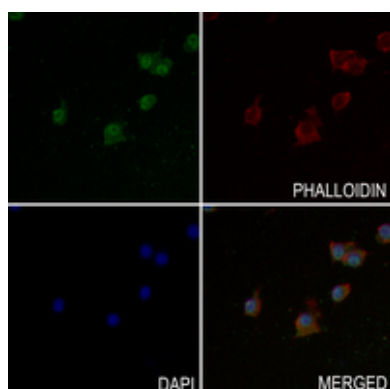
Name	PDE4B (HGNC:8781)
Synonyms	DPDE4
Function	Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes (PubMed: 15260978). May be involved in mediating central nervous system effects of therapeutic agents ranging from antidepressants to antiasthmatic and anti-inflammatory agents.
Cellular Location	[Isoform PDE4B5]: Cytoplasm. Cell membrane
Tissue Location	Expressed in brain, heart, lung and skeletal muscle (PubMed:17519386). Expressed in white blood cells (PubMed:8392015)



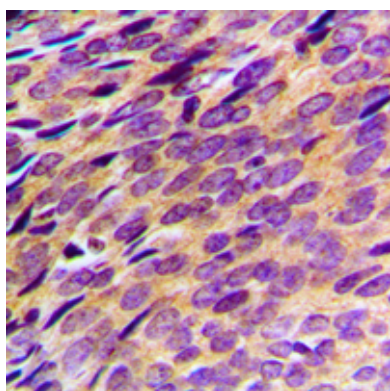
Western blot analysis of PDE4B/C/D expression in HeLa (A) whole cell lysates. (Predicted band size: 83; 79; 91 kD; Observed band size: 80 kD)



Immunohistochemical analysis of PDE4B/C/D staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PDE4B/C/D staining in RAW264.7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



Immunohistochemical analysis of PDE4B/C/D staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.