

**Goat Anti-Phosphodiesterase 4B Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1822a****Specification**

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**Goat Anti-Phosphodiesterase 4B Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q07343</a>
Other Accession	<a href="#">NP_001032417</a> , <a href="#">5142</a>
Reactivity	Mouse
Predicted	Human, Rat
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	83343

**Goat Anti-Phosphodiesterase 4B Antibody - Additional Information****Gene ID** 5142**Other Names**

cAMP-specific 3', 5'-cyclic phosphodiesterase 4B, 3.1.4.53, DPDE4, PDE32, PDE4B, DPDE4

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**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**

Goat Anti-Phosphodiesterase 4B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-Phosphodiesterase 4B Antibody - 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: <http://www.uniprot.org/citations/15260978> target="\_blank">15260978</a>). 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)

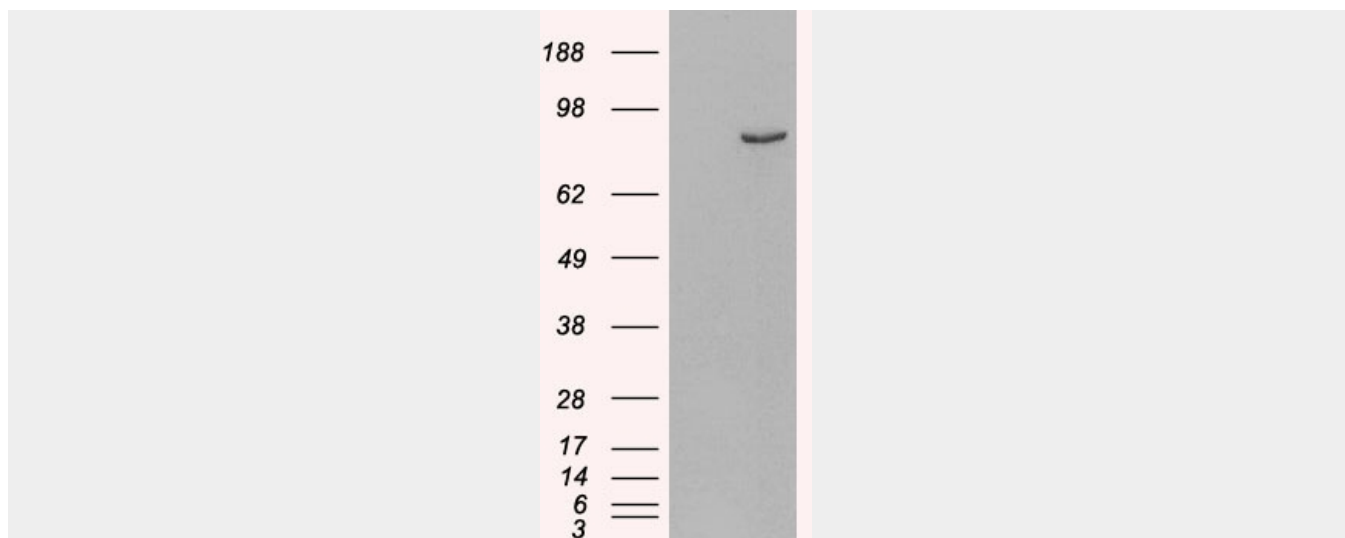
**Goat Anti-Phosphodiesterase 4B Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-Phosphodiesterase 4B Antibody - Images**

AF1822a (0.5 µg/ml) staining of Mouse Brain Lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



HEK293 overexpressing Human PDE4B (RC211956) and probed with AF1822a (mock transfection in first lane), tested by Origene.

### Goat Anti-Phosphodiesterase 4B Antibody - Background

This gene is a member of the type IV, cyclic AMP (cAMP)-specific, cyclic nucleotide phosphodiesterase (PDE) family. Cyclic nucleotides are important second messengers that regulate and mediate a number of cellular responses to extracellular signals, such as hormones, light, and neurotransmitters. The cyclic nucleotide phosphodiesterases (PDEs) regulate the cellular concentrations of cyclic nucleotides and thereby play a role in signal transduction. This gene encodes a protein that specifically hydrolyzes cAMP. Altered activity of this protein has been associated with schizophrenia and bipolar affective disorder. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.

### Goat Anti-Phosphodiesterase 4B Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Phosphodiesterase 4B genetic variants are not associated with antipsychotic-induced tardive dyskinesia. Souza RP, et al. Int Clin Psychopharmacol, 2010 Sep. PMID 20436352.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Human variation in alcohol response is influenced by variation in neuronal signaling genes. Joslyn G, et al. Alcohol Clin Exp Res, 2010 May. PMID 20201926.

Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.