

**Goat Anti-PDE4D Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1802a****Specification**

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**Goat Anti-PDE4D Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q08499</a>
Other Accession	<a href="#">NP_001159371</a> , <a href="#">5144</a>
Reactivity	Human, Mouse
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	91115

**Goat Anti-PDE4D Antibody - Additional Information****Gene ID** 5144**Other Names**

cAMP-specific 3', 5'-cyclic phosphodiesterase 4D, 3.1.4.53, DPDE3, PDE43, PDE4D, DPDE3

**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-PDE4D Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PDE4D Antibody - Protein Information****Name** PDE4D ([HGNC:8783](#))**Synonyms** DPDE3**Function**

Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes.

**Cellular Location**

Apical cell membrane. Cytoplasm. Membrane. Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton,

microtubule organizing center, centrosome Note=Found in the soluble fraction, associated with membranes, and associated with the cytoskeleton and the centrosome (By similarity) Colocalized with SHANK2 to the apical membrane of colonic crypt cells

#### Tissue Location

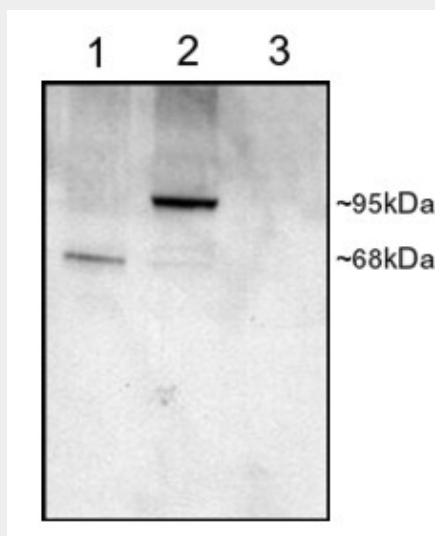
Expressed in colonic epithelial cells (at protein level). Widespread; most abundant in skeletal muscle [Isoform 8]: Detected in brain, placenta, lung and kidney.

#### Goat Anti-PDE4D Antibody - Protocols

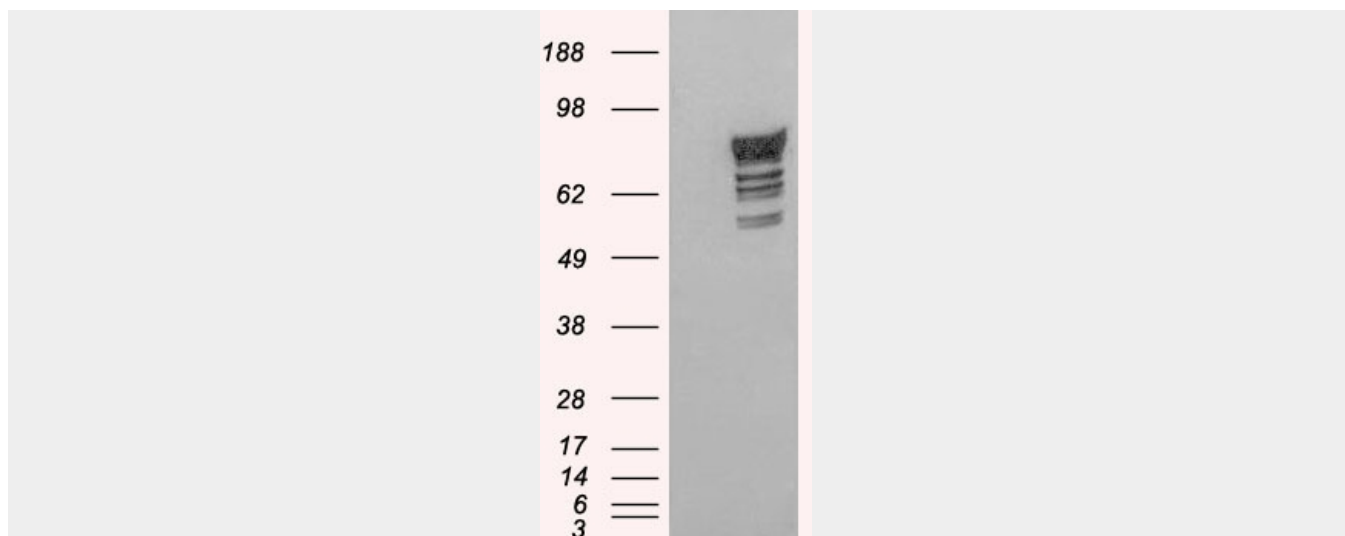
Provided below are standard protocols that you may find useful for product applications.

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

#### Goat Anti-PDE4D Antibody - Images



AF1802a staining (1  $\mu$ g/ml) of COS cell lysates (25  $\mu$ g protein): transfected with Human PDE4D1 (1), transfected with Human PDE4D3 (2), untransfected (3). Primary incubation was 1 hour. Detected by chemiluminescence.



HEK293 overexpressing Human PDE4D2 (RC212410) and probed with AF1802a (mock transfection in first lane), tested by Origene.

### Goat Anti-PDE4D Antibody - Background

This gene encodes one of four mammalian counterparts to the fruit fly 'dunce' gene. The encoded protein has 3',5'-cyclic-AMP phosphodiesterase activity and degrades cAMP, which acts as a signal transduction molecule in multiple cell types. This gene uses different promoters to generate multiple alternatively spliced transcript variants that encode functional proteins.

### Goat Anti-PDE4D Antibody - References

Analyses of shared genetic factors between asthma and obesity in children. Meln E, et al. J Allergy Clin Immunol, 2010 Sep. PMID 20816195.  
[Phosphodiesterase 4D (PDE4D) gene polymorphism in patients with acute stroke from Moscow] . Genetika, 2010 Jun. PMID 20734779.  
A genome-wide association study of neuroticism in a population-based sample. Calboli FC, et al. PLoS One, 2010 Jul 9. PMID 20634892.  
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-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.  
Sex-differential genetic effect of phosphodiesterase 4D (PDE4D) on carotid atherosclerosis. Liao YC, et al. BMC Med Genet, 2010 Jun 12. PMID 20540798.