

**Goat Anti-PDE5A Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1804a****Specification**

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**Goat Anti-PDE5A Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O76074</a>
Other Accession	<a href="#">NP_237223</a> , <a href="#">8654</a>
Reactivity	Human
Predicted	Rat, Dog, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	99985

**Goat Anti-PDE5A Antibody - Additional Information****Gene ID** 8654**Other Names**

cGMP-specific 3', 5'-cyclic phosphodiesterase, 3.1.4.35, cGMP-binding cGMP-specific phosphodiesterase, CGB-PDE, PDE5A, PDE5

**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-PDE5A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-PDE5A Antibody - Protein Information****Name** PDE5A ([HGNC:8784](#))**Synonyms** PDE5**Function**

Plays a role in signal transduction by regulating the intracellular concentration of cyclic nucleotides. This phosphodiesterase catalyzes the specific hydrolysis of cGMP to 5'-GMP (PubMed:&lt;a href="http://www.uniprot.org/citations/9714779" target="\_blank"&gt;9714779&lt;/a&gt;),

PubMed:<a href="http://www.uniprot.org/citations/15489334" target="\_blank">15489334</a>). Specifically regulates nitric-oxide- generated cGMP (PubMed:<a href="http://www.uniprot.org/citations/15489334" target="\_blank">15489334</a>).

#### Tissue Location

Expressed in aortic smooth muscle cells, heart, placenta, skeletal muscle and pancreas and, to a much lesser extent, in brain, liver and lung

#### Goat Anti-PDE5A Antibody - Protocols

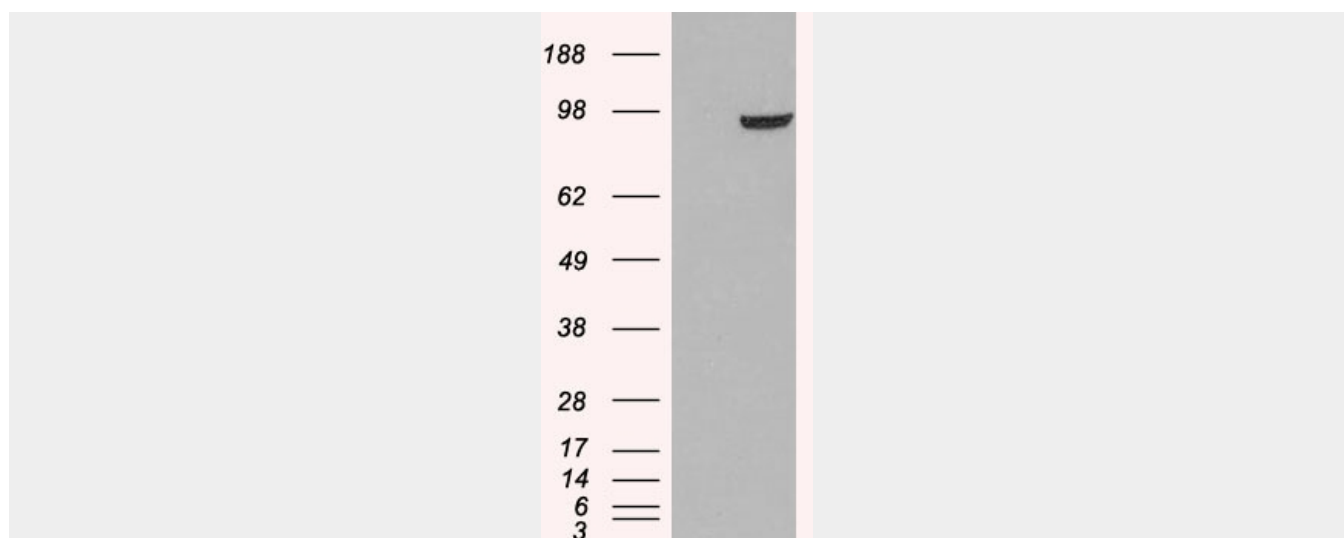
Provided below are standard protocols that you may find useful for product applications.

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

#### Goat Anti-PDE5A Antibody - Images



AF1804a staining (0.3 µg/ml) of human lung lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



HEK293 overexpressing PDE5A (RC218974) and probed with AF1804a (mock transfection in first lane), tested by Origene.

### Goat Anti-PDE5A Antibody - Background

This gene encodes a cGMP-binding, cGMP-specific phosphodiesterase, a member of the cyclic nucleotide phosphodiesterase family. This phosphodiesterase specifically hydrolyzes cGMP to 5'-GMP. It is involved in the regulation of intracellular concentrations of cyclic nucleotides and is important for smooth muscle relaxation in the cardiovascular system. Alternative splicing of this gene results in three transcript variants encoding distinct isoforms.

### Goat Anti-PDE5A Antibody - References

Expression of phosphodiesterase type 5A in human spermatozoa and influence of its inhibition on motility and functional sperm parameters. Foresta C, et al. J Endocrinol Invest, 2010 Jul 1. PMID 20595799.

Signalling pathways involved in sildenafil-induced relaxation of human bladder dome smooth muscle. Oger S, et al. Br J Pharmacol, 2010 Jul. PMID 20590607.

Phosphodiesterase-5 gene (PDE5A) polymorphisms are associated with progression of childhood IgA nephropathy. Hahn WH, et al. Pediatr Nephrol, 2010 Sep. PMID 20563733.

Attenuated proliferation and trans-differentiation of prostatic stromal cells indicate suitability of phosphodiesterase type 5 inhibitors for prevention and treatment of benign prostatic hyperplasia. Zenzmaier C, et al. Endocrinology, 2010 Aug. PMID 20555034.

A new era in the treatment of erectile dysfunction: chronic phosphodiesterase type 5 inhibition. Fusco F, et al. BJU Int, 2010 Jun. PMID 20553468.