

## Product datasheet for **TA336701**

### PDE9A Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, IP, WB
Recommended Dilution:	Immunohistochemistry: 1:400, Immunocytochemistry/ Immunofluorescence: 1:1000, Immunoprecipitation: 1:1000, Western Blot: 1:1000, Immunohistochemistry-Paraffin: 1:400
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Sequence from the C-terminal region of PDE9A
Formulation:	PBS, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Immunogen affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	68 kDa
Gene Name:	phosphodiesterase 9A
Database Link:	<a href="#">NP_002597</a> <a href="#">Entrez Gene 18585 Mouse</a> <a href="#">Entrez Gene 191569 Rat</a> <a href="#">Entrez Gene 5152 Human</a> <a href="#">O76083</a>



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**Background:**

Cyclic nucleotide phosphodiesterases (PDEs) are enzymes which catalyzes the hydrolysis of cyclic adenosine 30,50-monophosphate (cAMP) and/or cyclic guanosine 30,50-monophosphate (cGMP); and PDE9A (high affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A) is a PDE member which hydrolyzes the second messenger cGMP, an important regulator of several critical cellular physiological processes. PDE9A activity gets modulated by metal ions and it can bind 2 divalent metal cations per subunit - site 1 binds zinc ions, whereas, site 2 preferentially associates with magnesium and/or manganese ions. PDE9A is expressed in most of the solid tissues and because of its location as well as contribution to the regulation of steady-state cellular concentrations of cyclic nucleotides, PDE9A has been suggested as a potential candidate for diseases such as bipolar affective disorder and its overexpression has been linked to Down syndrome. Moreover, PDE9A deficient mice fed a high-fat diet have been reported to exhibit a reduced weight gain and fat mass compared with wild-type mice.

**Synonyms:**

HSPDE9A2

**Note:**

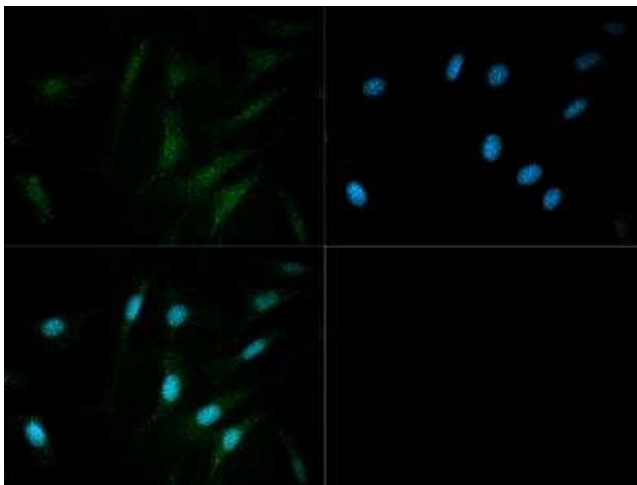
This PDE9A antibody is useful for Immunocytochemistry/Immunofluorescence, Immunohistochemistry on paraffin-embedded sections, Immunoprecipitation, and Western Blot, where a band can be seen at ~68 kDa. In ICC/IF, cytoplasmic staining was observed in NIH-3T3 cells.

**Protein Families:**

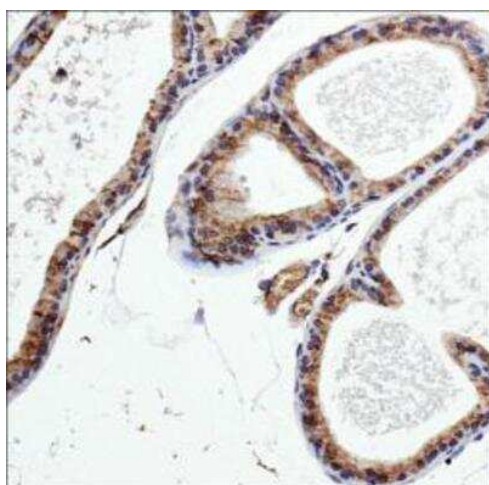
Druggable Genome

**Protein Pathways:**

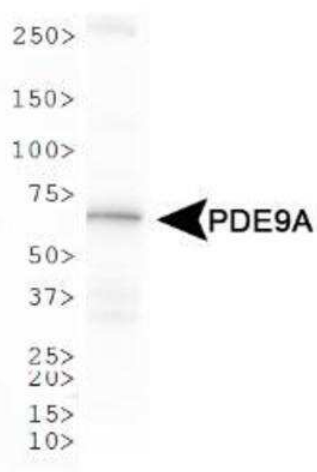
Progesterone-mediated oocyte maturation, Purine metabolism

**Product images:**

Immunocytochemistry/Immunofluorescence:  
PDE9A Antibody TA336701 - PDE9A antibody was tested in NIH/3T3 cells with Dylight 488 (green). Nuclei were counterstained with DAPI (blue).



Immunohistochemistry: PDE9A Antibody TA336701 - PDE9A antibody was tested in mouse prostate using DAB with hematoxylin counterstain.



Western Blot: PDE9A Antibody TA336701 - WB analysis of PDE9A in HeLa whole cell lysate.