

Anti-PDE5A/PDE5 antibody ab14672

★★★★★ [1 Abreviews](#) [12 References](#) [2 Images](#)

Overview

Product name	Anti-PDE5A/PDE5 antibody
Description	Rabbit polyclonal to PDE5A/PDE5
Host species	Rabbit
Specificity	This antibody detects 99 and 89 kDa PDE5A/PDE5 proteins in various tissues.
Tested applications	Suitable for: IHC-P, IP, WB, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human PDE5A/PDE5. Synthetic peptide common to all PDE5A variants, taken within amino acid region 120-170 of human PDE5A protein. (Peptide available as ab150691)
General notes	<p>Storage of very dilute antibody solutions is not recommended.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.02% Sodium azide
Purity	Immunogen affinity purified
Purification notes	Purified on antigen sepharose affinity column.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab14672 in the following tested applications.

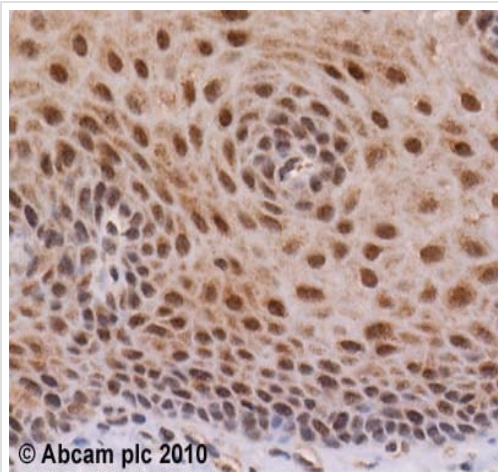
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (1)	1/10. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.
ICC/IF		Use a concentration of 1 µg/ml.

Target

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.
Tissue specificity	Expressed in aortic smooth muscle cells, heart, placenta, skeletal muscle and pancreas and, to a much lesser extent, in brain, liver and lung.
Pathway	Purine metabolism; 3',5'-cyclic GMP degradation; GMP from 3',5'-cyclic GMP: step 1/1.
Sequence similarities	Belongs to the cyclic nucleotide phosphodiesterase family. Contains 2 GAF domains.
Domain	Composed of a C-terminal catalytic domain containing two putative divalent metal sites and an N-terminal regulatory domain which contains two homologous allosteric cGMP-binding regions, A and B.
Post-translational modifications	Phosphorylation is regulated by binding of cGMP to the two allosteric sites.

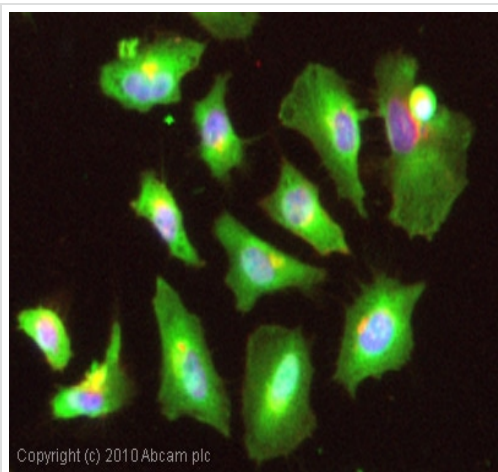
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDE5A/PDE5 antibody (ab14672)

ab14672 (4µg/ml) staining PDE5A/PDE5 in human oesophagus using an automated system (DAKO Autostainer Plus). Using this protocol there is staining of the cytoplasm and nuclei in stratified squamous epithelium cells.

Sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffers EDTA pH 9.0 in a DAKO PT link. Slides were peroxidase blocked in 3% H₂O₂ in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that, for manual staining, optimization of primary antibody concentration and incubation time is recommended. Signal amplification may be required.



Immunocytochemistry/ Immunofluorescence - Anti-PDE5A/PDE5 antibody (ab14672)

ICC/IF image of ab14672 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab14672, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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