




Product datasheet

Anti-PDE5A/PDE5 antibody ab224232

5 Images

Overview

Product name	Anti-PDE5A/PDE5 antibody
Description	Rabbit polyclonal to PDE5A/PDE5
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Cow, Dog 
Immunogen	Recombinant fragment corresponding to Human PDE5A/PDE5 aa 300-450. Database link: O76074  Run BLAST with  Run BLAST with
Positive control	IHC-P: Human duodenum, pancreatic, and prostate tissue. ICC/IF: U-2 OS cells.
General notes	<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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab224232 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
ICC/IF		Use a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.
IHC-P		1/200 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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.

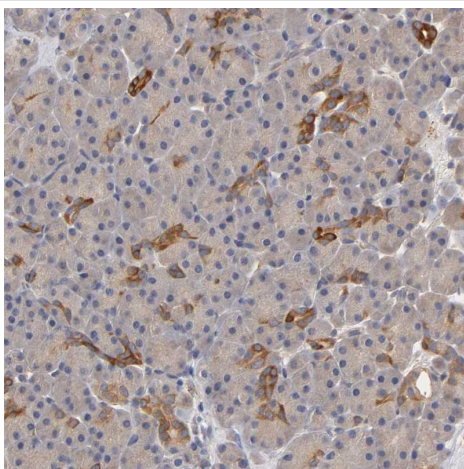
Domain

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

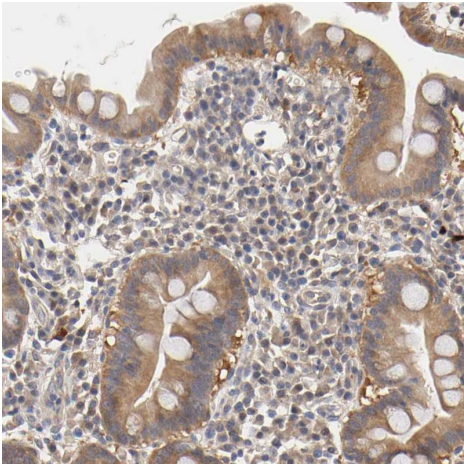
Phosphorylation is regulated by binding of cGMP to the two allosteric sites.

Images



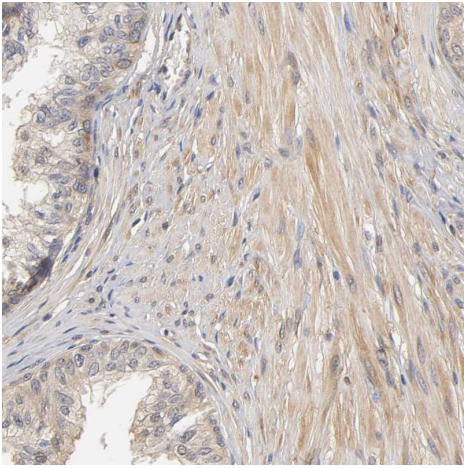
Paraffin-embedded human pancreas stained for PDE5A using ab224232 at 1/200 dilution in immunohistochemical analysis. Shows moderate cytoplasmic positivity in intercalated ducts.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDE5A/PDE5 antibody (ab224232)



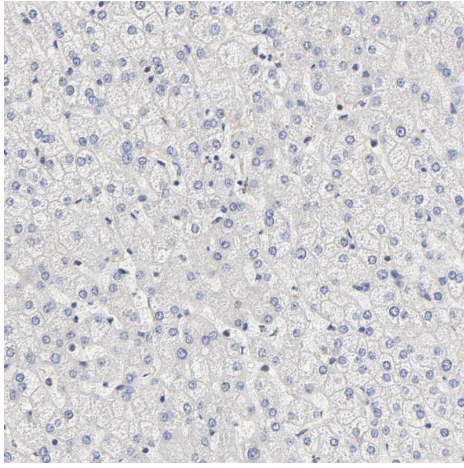
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDE5A/PDE5 antibody (ab224232)

Paraffin-embedded human duodenum stained for PDE5A using ab224232 at 1/200 dilution in immunohistochemical analysis. Shows weak to moderate cytoplasmic positivity in glandular cells.



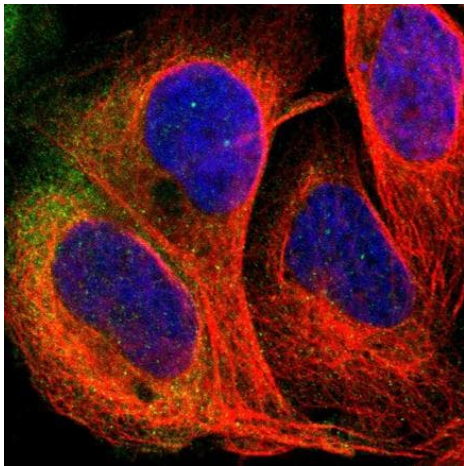
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDE5A/PDE5 antibody (ab224232)

Paraffin-embedded human prostate stained for PDE5A using ab224232 at 1/200 dilution in immunohistochemical analysis. Shows weak to moderate cytoplasmic positivity in smooth muscle cells.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDE5A/PDE5 antibody (ab224232)

Paraffin-embedded human liver stained for PDE5A using ab224232 at 1/200 dilution in immunohistochemical analysis. Shows no positivity in hepatocytes as expected.



Immunocytochemistry/ Immunofluorescence - Anti-PDE5A/PDE5 antibody (ab224232)

PFA-fixed, Triton X-100 permeabilized U-2 OS (human bone osteosarcoma epithelial cell line) cells stained for PDE5A/PDE5 (green) using ab224232 (4 µg/ml) in ICC/IF.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors