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PDE5 Antibody

Store at -20C
#2395

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 100	Source/Isotype: Rabbit	UniProt ID: #O76074	Entrez-Gene Id: 8654
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

PDE5 Antibody detects endogenous levels of total PDE5 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the carboxy-terminal sequence of human PDE5. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The superfamily of phosphodiesterases (PDEs) catalyses the hydrolysis of 3',5'-cyclic nucleotides into the corresponding nucleotide 5'-monophosphates. PDE5 is a cGMP-specific enzyme that contains two cGMP binding sites in its amino-terminal regulatory domain (1). Elevation of cGMP levels causes activation of PKG, which phosphorylates PDE5 at Ser102 (2). Phosphorylation of PDE5 stimulates its enzymatic activity and enhances cGMP binding affinity in the regulatory domain, leading to a decrease in intracellular cGMP levels (3,4).

Background References

1. Corbin, J.D. and Francis, S.H. (1999) *J. Biol. Chem.* 274, 13729-13732.
2. Thomas, L.K. et al. (1990) *J. Biol. Chem.* 265, 14971-14978.
3. Rybalkin, S.D. et al. (2002) *J. Biol. Chem.* 277, 3310-3317.
4. Francis, S.H. et al. (2002) *J. Biol. Chem.* 277, 47581-47587.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse

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