

#3585 Store at -20C

PDE5 (P434) Antibody

**Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H	Endogenous	100	Rabbit	#O76074	8654

Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	1:100
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 (P434) Antibody detects endogenous levels of total PDE5 protein. The antibody cross-reacts with a 35-40 kDa protein of unknown origin.	
Species predicted to react based on 100% sequence homology:	Monkey	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to central residues of human PDE5.	
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	<ol style="list-style-type: none"> 1. Corbin, J.D. and Francis, S.H. (1999) <i>J. Biol. Chem.</i> 274, 13729-13732. 2. Thomas, L.K. et al. (1990) <i>J. Biol. Chem.</i> 265, 14971-14978. 3. Rybalkin, S.D. et al. (2002) <i>J. Biol. Chem.</i> 277, 3310-3317. 4. Francis, S.H. et al. (2002) <i>J. Biol. Chem.</i> 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	WB: Western Blotting IP: Immunoprecipitation
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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