



PDE5A Polyclonal Antibody

Catalog No	YP-Ab-05458
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	PDE5A PDE5
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	PDE5A Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CGB PDE;CN5A;PDE5;PDE5A;PDE5A1;phosphodiesterase 5A;cGMP;PDE5A PDE5;cGMP-specific 3';5'-cyclic phosphodiesterase (EC 3.1.4.35) (cGMP-binding cGMP-specific phosphodiesterase) (CGB-PDE)
Observed Band	100 kDa
Calculated Molecular Weight	875 aa, 100 kDa
Cell Pathway	cytosol,
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.
Function	catalytic activity:Guanosine 3',5'-cyclic phosphate + H(2)O = guanosine 5'-phosphate.,cofactor:Divalent cations. Zinc ions yields maximum activity. Manganese, magnesium and cobalt also support catalysis but at much higher concentrations.,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.,enzyme regulation:Sildenafil (Viagra) is a highly selective and potent inhibitor of PDE5A and is effective in the treatment of penile erectile dysfunction. Also inhibited by zaprinast.,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.,pathway:Purine metabolism; cGMP degradation; GMP from cGMP: step 1/1.,PTM:Phosphoryla

Background

This gene encodes a cGMP-binding, cGMP-specific phosphodiesterase, a member of the cyclic nucleotide phosphodiesterase family. This phosphodiesterase specifically hydrolyzes cGMP to 5'-GMP. It is involved in the regulation of intracellular concentrations of cyclic nucleotides and is important for smooth muscle relaxation in the cardiovascular system. Alternative splicing of this gene results in three transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2008],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images