

PDE5A recombinant protein

PDE5A, Active

CATALOG # AAA73104	HOST Sf9 insect cells using baculovirus	APPLICATIONS PDE Assay
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PRODUCT SYNONYMS

PDE5A; Active; PDE5A recombinant protein

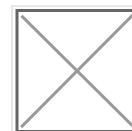
PRODUCT SPECIFICATIONS

Host	Sf9 insect cells using baculovirus
Form/Format	50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Sequence Positions	537-end
Sequence Length	7005
Applicable Applications for PDE5A recombinant protein	PDE Assay
Species	Human
Tag	GST tag
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store product at -70 degree C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for PDE5A recombinant protein	Description: Recombinant human PDE5A (537-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. Scientific Background: PDE5A is a member of the cyclic nucleotide phosphodiesterase family. PDE5A is a cGMP-specific phosphodiesterase and 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. PDE5A regulates nitric oxide (NO)-induced relaxation and cGMP breakdown in smooth muscle cells in vas deferens (1). PDE5A expression predisposes mice to adverse left ventricular remodeling after myocardial infarction. Furthermore, increased myocardial PDE5A expression in patients with advanced cardiomyopathy can contribute to the development of heart failure (2).
Product Categories/Family for PDE5A recombinant protein	Enzymes; Active Phosphodiesterases

References	1. Mancina R, et al: Expression and functional activity of phosphodiesterase type 5 in human and rabbit vas deferens. Mol Hum Reprod. 2005 Feb;11 (2):107-15. 2. Pokreisz P, et al: Ventricular phosphodiesterase-5 expression is increased in patients with advanced heart failure and contributes to adverse ventricular remodeling after myocardial infarction in mice. Circulation. 2009 Jan 27;119 (3):408-16.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	61744434
NCBI GeneID	8654
NCBI Accession #	NM_001083.3
NCBI GenBank Nucleotide #	NM_001083
UniProt Accession #	O76074; O75026; O75887; Q86UI0; Q86V66; Q9Y6Z6; A0AV69; A8K2C4
Molecular Weight	~63 kDa
NCBI Official Full Name	Homo sapiens phosphodiesterase 5A (PDE5A), transcript variant 1, mRNA
NCBI Official Synonym Full Names	phosphodiesterase 5A
NCBI Official Symbol	PDE5A
NCBI Official Synonym Symbols	CN5A; PDE5; CGB-PDE
NCBI Protein Information	cGMP-specific 3',5'-cyclic phosphodiesterase
UniProt Protein Name	cGMP-specific 3',5'-cyclic phosphodiesterase
UniProt Gene Name	PDE5A
UniProt Synonym Gene Names	PDE5; CGB-PDE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.