

Recombinant Human PDE5A, GST-tagged, Active

Cat. No. PDE5A-479H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PDE5A (537-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. MW = 63 kDa.
Species	Human
Source	Sf9 Cells
Protein Length	537-end a.a.
Description	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. 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.
Sequence	537-end.
Applications	PDE Assay.
Storage And Stability	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable

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performance, avoid repeated handling and multiple freeze/thaw cycles.

GENE INFORMATION

Gene Name	PDE5A phosphodiesterase 5A, cGMP-specific [Homo sapiens]
Synonyms	PDE5A; phosphodiesterase 5A, cGMP-specific; CN5A; PDE5; PDE5A1; CGB-PDE; cGMP-binding cGMP-specific 3",5"-cyclic nucleotide phosphodiesterase; EC 3.1.4.35; cGMP-binding cGMP-specific phosphodiesterase; phosphodiesterase 5A; cGMP-specific 3",5"-cyclic phosphodiesterase
Gene ID	8654
mRNA Refseq	NM_001083
Protein Refseq	NP_001074
MIM	603310
UniProt ID	O76074
Chromosome Location	4q25-q27
Pathway	Progesterone-mediated oocyte maturation; Purine metabolism
Function	3",5"-cyclic-GMP phosphodiesterase activity; cGMP binding; hydrolase activity; magnesium ion binding; nucleotide binding; zinc ion binding
PDB rendering based on 3BJC.	

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