

Active Recombinant Human PDE6A, GST-tagged

Cat. No. PDE6A-1529H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human PDE6A (31-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Sf9 Cells
ProteinLength	31 aa-end
Description	PDE6A encodes the cyclic-GMP (cGMP)-specific phosphodiesterase 6A and is expressed in cells of the retinal rod outer segment. The phosphodiesterase 6 holoenzyme is a heterotrimer composed of an alpha, beta, and two gamma subunits. cGMP is an important regulator of rod cell membrane current, and its dynamic concentration is established by phosphodiesterase 6A cGMP hydrolysis and guanylate cyclase cGMP synthesis. The protein is a subunit of a key phototransduction enzyme and participates in processes of transmission and amplification of the visual signal. Mutations in this gene have been identified as one cause of autosomal recessive retinitis pigmentosa.
Form	Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Bio-activity	38 nmol/min/mg
Molecular Mass	~120 kDa

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Purity	>70%
Applications	PDE Assay
Storage	Store at –70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. Avoid freeze/thaw cycles.
Concentration	0.1µg/µl
GENE INFORMATION	
Gene Name	PDE6A phosphodiesterase 6A, cGMP-specific, rod, alpha [Homo sapiens]
Official Symbol	PDE6A
Synonyms	PDE6A; phosphodiesterase 6A, cGMP-specific, rod, alpha; PDEA; rod cGMP-specific 3,5-cyclic phosphodiesterase subunit alpha; PDE V-B1; GMP-PDE alpha; cGMP phosphodiesterase alpha subunit; rod photoreceptor cGMP phosphodiesterase alpha subunit; RP43; CGPR-A;
Gene ID	5145
mRNA Refseq	NM_000440
Protein Refseq	NP_000431
MIM	180071
UniProt ID	P16499
Chromosome	5q31.2-q34

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Location	
Pathway	Hemostasis, organism-specific biosystem; Nitric oxide stimulates guanylate cyclase, organism-specific biosystem; Phototransduction, organism-specific biosystem; Phototransduction, conserved biosystem; Platelet homeostasis, organism-specific biosystem; Purine metabolism, organism-specific biosystem; Purine metabolism, conserved biosystem;
Function	3,5-cyclic-GMP phosphodiesterase activity; hydrolase activity; metal ion binding; phosphoric diester hydrolase activity;

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