Active Recombinant Human PDE6A, GST-tagged

Cat. No. PDE6A-1613H **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-end
Description	This gene encodes the cyclic-GMP (cGMP)-specific phosphodiesterase 6A alpha subunit, 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
Stability	1 yr at -70oC from date of shipment.
Storage	Store product at –70oC. 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.
Concentration	0.1 ug/ul

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
Gene ID	5145
mRNA Refseq	NM_000440
Protein Refseq	NP_000431
MIM	180071
UniProt ID	P16499

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Chromosome Location	5q31.2-q34
Pathway	Activation of the phototransduction cascade; Inactivation, recovery and regulation of the phototransduction cascade; Signal Transduction
Function	3',5'-cyclic-GMP phosphodiesterase activity; metal ion binding

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