



Human PDE6A peptide (DAG-P1025)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen 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. [provided by RefSeq, Jul 2008]
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the cyclic nucleotide phosphodiesterase family. Contains 2 GAF domains.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	PDE6A phosphodiesterase 6A, cGMP-specific, rod, alpha [Homo sapiens (human)]
Official Symbol	PDE6A
Synonyms	PDE6A; phosphodiesterase 6A, cGMP-specific, rod, alpha; PDEA; RP43; CGPR-A; 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;

Entrez Gene ID	5145
mRNA Refseq	NM_000440.2
Protein Refseq	NP_000431.2
UniProt ID	P16499
Chromosome Location	5q31.2-q34
Pathway	Activation of the phototransduction cascade, organism-specific biosystem; Ca2+ pathway, organism-specific biosystem; Disease, organism-specific biosystem; Diseases associated with visual transduction, organism-specific biosystem; Inactivation, recovery and regulation of the phototransduction cascade, organism-specific biosystem; Phototransduction, organism-specific biosystem; Phototransduction, conserved biosystem; Purine metabolism, organism-specific biosystem; Purine metabolism, conserved bios
Function	3,5-cyclic-GMP phosphodiesterase activity; metal ion binding;