

Active Recombinant Human PDE4D protein, GST-tagged

Cat. No. PDE4D-10H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human PDE4D(2–507 aa) fused with GST tag at N-terminal was expressed in Insect cells.
Species	Human
Source	Insect Cells
ProteinLength	2-507 a.a.
Description	This gene encodes one of four mammalian counterparts to the fruit fly 'dunce' gene. The encoded protein has 3',5'-cyclic-AMP phosphodiesterase activity and degrades cAMP, which acts as a signal transduction molecule in multiple cell types. This gene uses different promoters to generate multiple alternatively spliced transcript variants that encode functional proteins.
Form	40 mM Tris-HCl, pH 8.0, 110 mM NaCl, 2.2 mM KCl, 3 mM DTT, 20% Glycerol and 16 mM Glutathione.
Bio-activity	≥ 13,600 pmol/min/μg
Molecular Mass	84 kDa
Purity	> 86%
Unit Definition	One unit is defined as the amount of enzyme that will convert 1 pmole of 3', 5'-cAMP

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

to 5'-AMP per minute at 37 centigrade.

Applications Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

Storage >6 months at -80 centigrade. Avoid freeze/thaw cycles.

Concentration 0.27 mg/ml

GENE INFORMATION

Gene Name PDE4D phosphodiesterase 4D, cAMP-specific [Homo sapiens]

Official Symbol PDE4D

Synonyms PDE4D; phosphodiesterase 4D, cAMP-specific; DPDE3, phosphodiesterase 4D, cAMP specific (dunce (Drosophila) homolog phosphodiesterase E3); cAMP-specific 3,5-cyclic phosphodiesterase 4D; phosphodiesterase E3 dunce homolog (Drosophila); cAMP-specific phosphodiesterase PDE4D6; phosphodiesterase 4D, cAMP-specific (phosphodiesterase E3 dunce homolog, Drosophila); DPDE3; PDE43; STRK1; HSPDE4D; PDE4DN2; FLJ97311; DKFZp686M11213;

Gene ID 5144

mRNA Refseq NM_001197221

Protein Refseq NP_001184150

MIM 600129

UniProt ID Q08499

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Chromosome Location	5q12
Pathway	DARPP-32 events, organism-specific biosystem; G Protein Signaling Pathways, organism-specific biosystem; G alpha (s) signalling events, organism-specific biosystem; GPCR downstream signaling, organism-specific biosystem; Morphine addiction, organism-specific biosystem; Morphine addiction, conserved biosystem; Myometrial Relaxation and Contraction Pathways, organism-specific biosystem;
Function	3,5-cyclic-AMP phosphodiesterase activity; 3,5-cyclic-nucleotide phosphodiesterase activity; cAMP binding; drug binding; hydrolase activity; metal ion binding; phosphoric diester hydrolase activity;
	