



# Human PDE4D peptide (DAG-P0999)

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

## PRODUCT INFORMATION

<b>Antigen Description</b>	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.[provided by RefSeq, Sep 2009]
<b>Specificity</b>	Widespread; most abundant in skeletal muscle. Isoform 6 is detected in brain. Isoform 8 is detected in brain, placenta, lung and kidney. Isoform 7 is detected in heart and skeletal muscle.
<b>Purity</b>	70 - 90% by HPLC.
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the cyclic nucleotide phosphodiesterase family. PDE4 subfamily.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	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

<b>Gene Name</b>	<a href="#">PDE4D phosphodiesterase 4D, cAMP-specific [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	PDE4D
<b>Synonyms</b>	PDE4D; phosphodiesterase 4D, cAMP-specific; DPDE3; PDE43; STRK1; ACRDYS2; HSPDE4D; PDE4DN2; cAMP-specific 3,5-cyclic phosphodiesterase 4D; cAMP-specific phosphodiesterase PDE4D6; phosphodiesterase 4D, cAMP-specific (phosphodiesterase E3

dunce homolog, Drosophila);

<b>Entrez Gene ID</b>	<a href="#">5144</a>
<b>mRNA Refseq</b>	<a href="#">NM_001104631.1</a>
<b>Protein Refseq</b>	<a href="#">NP_001098101.1</a>
<b>UniProt ID</b>	Q08499
<b>Chromosome Location</b>	5q12
<b>Pathway</b>	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; Opioid Signalling, organism-specific biosystem; Purine metabolism, organism-specific biosystem; Purine metabolis
<b>Function</b>	3,5-cyclic-AMP phosphodiesterase activity; 3,5-cyclic-AMP phosphodiesterase activity; 3,5-cyclic-nucleotide phosphodiesterase activity; ATPase binding; beta-2 adrenergic receptor binding; cAMP binding; drug binding; enzyme binding; ion channel binding; io