

Recombinant Human PDE4B, GST-tagged, Active

Cat. No. PDE4B-476H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinanthuman PDE4B (305-end) was expressed by <i>baculovirus</i> in <i>Sf9 insect cell</i> using an N-terminal GST tag. MW=78kDa.
Species	Human
Source	Sf9 Cells
Protein Length	305-end a.a.
Description	PDE4B is a member of the phosphodiesterase family of proteins that play a critical role in regulating intracellular levels of cAMP and has homology to the "dunce" gene of <i>Drosophila</i> . The "dunce" gene is one of several genes critical for normal learning and memory in the fly. Altered activity of PDE4B has been associated with schizophrenia and bipolar affective disorder. DISC1 interacts with the UCR2 domain of PDE4B and elevation of cellular cAMP leads to dissociation of PDE4B from DISC1 and in increase in PDE4B activity. PDE4B gene itself does not link to major depressive disorder (MDD) but elevated mRNA levels of PDE4B have been implicated in the pathophysiology of MDD.
Sequence	305-end.
Applications	PDE Assay.
Storage And Stability	Store product at -70oC. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable

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performance, avoid repeated handling and multiple freeze/thaw cycles.

22q13.33

1p31

GENE INFORMATION

Gene Name

PDE4B phosphodiesterase 4B, cAMP-specific (phosphodiesterase E4 dunce homolog, *Drosophila*) [*Homo sapiens*]

Synonyms

PDE4B; phosphodiesterase 4B, cAMP-specific (phosphodiesterase E4 dunce homolog, *Drosophila*); OTTHUMP00000010652; cAMP-specific 3',5'-cyclic phosphodiesterase 4B; cAMP-specific phosphodiesterase-4 B isoform; dunce-like phosphodiesterase E4; phosphodiesterase 4B; phosphodiesterase 4B, cAMP-specific; DPDE4; PDE4B5; PDEIVB; MGC126529; DKFZp686F2182; EC 3.1.4.17

Gene ID

5142

mRNA Refseq

NM_001037339

Protein Refseq

NP_001032416

MIM

600127

UniProt ID

Q07343

Pathway

Progesterone-mediated oocyte maturation; Purine metabolism; Signaling by GPCR

Function

3',5'-cyclic-AMP phosphodiesterase activity; hydrolase activity

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