

Recombinant Human PDE1C Protein (His & GST Tag)

Catalog No. PKSH030595

Note: Centrifuge before opening to ensure complete recovery of vial contents.

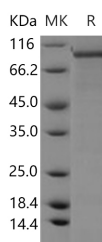
Description

Synonyms	cam-PDE1C;hCam-3;Hcam3
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Glu634
Accession	Q8TAE4
Calculated Molecular Weight	100 kDa
Observed molecular weight	97 kDa
Tag	N-His-GST
Bioactivity	Not validated for activity

Properties

Purity	> 85 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol, 3mM DTT Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

Background

PDE1C belongs to the cyclic nucleotide phosphodiesterase family, PDE1 subfamily. Phosphodiesterases (PDEs) are a

For Research Use Only

family of related phosphohydrolyases that selectively catalyze the hydrolysis of 3' cyclic phosphate bonds in adenosine and/or guanine 3',5' cyclic monophosphate (cAMP and/or cGMP). They regulate the cellular levels, localization and duration of action of these second messengers by controlling the rate of their degradation. PDEs are expressed ubiquitously, with each subtype having a specific tissue distribution. These enzymes are involved in many signal transduction pathways and their functions include vascular smooth muscle proliferation and contraction, cardiac contractility, platelet aggregation, hormone secretion, immune cell activation, and they are involved in learning and memory. PDE1C has a high affinity for both cAMP and cGMP. It is expressed in several tissues, including brain and heart. As a cyclic nucleotide phosphodiesterase, PDE1C has a dual-specificity for the second messengers cAMP and cGMP.