

Recombinant Protein Technical Manual Recombinant Human PDE1C Protein (His & GST Tag) RPES4584

## Product Data:

Product SKU: RPES4584	<b>Size:</b> 10µg
Species: Human	Expression host: Baculovirus-Insect Cells

**Uniprot:** Q8TAE4

## **Protein Information:**

Molecular Mass:	100 kDa
AP Molecular Mass:	97 kDa
Tag:	N-His & GST
Bio-activity:	
Purity:	> 85 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	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% gly, 3mM DTT
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	cam-PDE1C;hCam-3;Hcam3

## Sequence: Met 1-Glu634

## Background:

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