

Recombinant Human PDE1B Protein (His & GST Tag)

Catalog No. PKSH031014

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

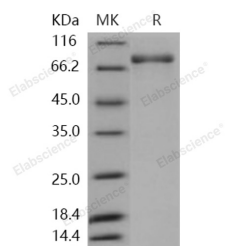
Description

Synonyms	PDE1B1;PDES1B
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Asp 536
Accession	Q01064-1
Calculated Molecular Weight	89.2 kDa
Observed molecular weight	75 kDa
Tag	N-His-GST
Bioactivity	Not validated for activity

Properties

Purity	> 94 % 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 50mM Tris, 100mM NaCl, pH 8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 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



> 94 % as determined by reducing SDS-PAGE.

Background

Calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1B, also known as Cam-PDE 1B and PDE1B, is a cytoplasm protein which belongs to the cyclic nucleotide phosphodiesterase family and PDE1 subfamily.

For Research Use Only

Phosphodiesterase-10A (PDE10A), Phosphodiesterase-1B (PDE1B), Phosphodiesterase-4B (PDE4B), and Phosphodiesterase-4A (PDE4A) are important regulators of signal transduction in striatum due to their catalysis of cyclic AMP and cyclic GMP. PDE1B is highly expressed in the striatum. It binds two divalent metal cations per subunit. Site one of PDE1B may preferentially bind zinc ions, while site two of PDE1B has a preference for magnesium and/or manganese ions. PDE1B is a cyclic nucleotide phosphodiesterase with a dual-specificity for the second messengers cAMP and cGMP, which are key regulators of many important physiological processes. It has a preference for cGMP as a substrate.