

Human PDE1B Protein (His & GST Tag)

Catalog Number: 11746-H20B



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

PDE1B1; PDES1B; Pde1b1

Protein Construction:

A DNA sequence encoding the human PDE1B long isoform (Q01064-1) (Met 1-Asp 536) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 94 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μ g of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant human PDE1B/GST chimera consists of 773 amino acids and has a calculated molecular mass of 89.2 kDa. It migrates as an approximately 75 kDa band in SDS-PAGE under reducing conditions.

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. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

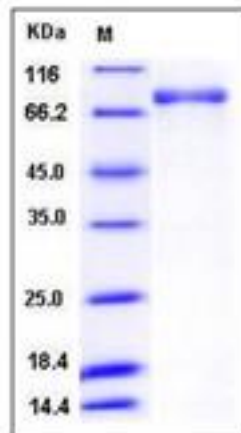
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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. 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.

References

- 1.Reed,T.M. et al.,1998, Mamm Genome. 9 (7):571-6.
- 2.Zhang K.Y.J. et al., 2004, Mol. Cell 15:279-86.
- 3.Siuciak,J.A. et al., 2007, Neuropharmacology. 53 (1):113-24.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>