



Recombinant Protein Technical Manual
Recombinant Human PDE1B Protein (His & GST Tag)
RPES0840

Product Data:

Product SKU: RPES0840

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q01064

Protein Information:

Molecular Mass: 89.2 kDa

AP Molecular Mass: 75 kDa

Tag: N-His & GST

Bio-activity:

Purity: > 94 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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 50mM Tris, 100mM NaCl, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: PDE1B1;PDES1B

Immunogen Information:

Sequence: Met 1-Asp 536

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. Phosphodiesterase0A (PDE10A), PhosphodiesteraseB (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.