Recombinant Human PPM1A protein (His Tag)

Catalog Number: PDEH101083

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

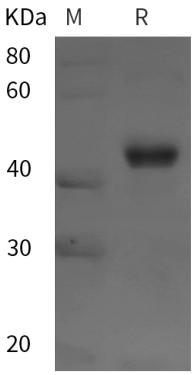
Description

Species	Human
Mol_Mass	41.8 kDa
Accession	P35813
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Protein Phosphatase 1A (PPM1A) is a member of the PP2C family of Ser/Thr protein phosphatases which are known to be negative regulators of cell stress response pathways. PPM1A has a broad specificity. PPM1A negatively regulates the activities of MAP kinases and MAP kinase kinases. Also, it negatively regulates TGF-beta signaling through dephosphorylating SMAD2 and SMAD3, resulting in their dissociation from SMAD4, nuclear export of the SMADs and termination of the TGF-beta-mediated signaling. In addition, PPM1A can dephosphorylate cyclin-dependent kinases, and thus may be involved in cell cycle control.

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