

Recombinant Protein Technical Manual Recombinant Human PPM1A Protein (His Tag)

RPES1769

Product Data:

Product SKU: RPES1769 **Size:** 10μg

Species: Human Expression host: E. coli

Uniprot: P35813

Protein Information:

Molecular Mass: 43.5 kDa

AP Molecular Mass: 45 kDa

Tag: C-6His

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue

ice/gel packs. Upon receipt, store it immediately at<-20°C.

Formulation: Supplied as a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

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

Application:

Synonyms: Protein Phosphatase 1A; Protein Phosphatase 2C Isoform Alpha; PP2C-Alpha;

Protein Phosphatase IA; PPM1A; PPPM1A;PP2C-ALPHA;PP2CA;PP2Calpha

Immunogen Information

Sequence: Gly2-Trp382

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.