



Recombinant Protein Technical Manual

Recombinant Mouse PPM1A Protein (His Tag)

RPES3197

Product Data:

Product SKU: RPES3197

Size: 50µg

Species: Mouse

Expression host: E. coli

Uniprot: NP_032936.1

Protein Information:

Molecular Mass: 43.3 kDa

AP Molecular Mass: 43.3 kDa

Tag: C-His

Bio-activity:

Purity: > 98 % as determined by SDS-PAGE

Endotoxin: Please contact us for more information.

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 10mM HEPES, 500 NaCl, pH 7.5

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

Application:

Synonyms: 2310003C21Rik;2900017D14Rik;AI427932;AU017636;MMPa-2;MPPa

Immunogen Information:

Sequence: Met 1-Trp 382

Background:

Protein phosphatase 1A (PPM1A / PP2CA) is an enzyme belonging to the PP2C family of Ser / Thr protein phosphatases. Members of PP2C family are negative regulators of cell stress response pathways and the MAP kinases and MAP kinase kinases. It has also been demonstrated to inhibit the activation of p38 and JNK kinase cascades. PPM1A dephosphorylates and promotes nuclear export of TGF β -activated Smad2/3. Ectopic expression of PPM1A abolishes TGF β -induced antiproliferative and transcriptional responses, whereas depletion of PPM1A enhances TGF β signaling in mammalian cells. It has been demonstrated that PPM1A / PP2CA, through dephosphorylation of Smad2/3, plays a critical role in terminating TGF β signaling. Overexpression of PPM1A is reported to activate the expression of the tumor suppressor gene TP53 / p53, which leads to cell apoptosis.