



Recombinant Rat Protein phosphatase 1A (Ppm1a)

Product Code	CSB-EP018489RA-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P20650
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	>85% (SDS-PAGE)
Sequence	GAFLDKPKM EKHNAQQQGN GLRYGLSSMQ GWRVEMEDAH TAVIGLPSGL ETWSFFAVYD GHAGSQVAKY CCEHLLDHIT NNQDFKGSAG APSVENVKNG IRTGFLEIDE HMRVMSEKKH GADRSSTAV GVLISPQHTY FINCGDSRGL LCRNRKVHFF TQDHKPSNPL EKERIQNAGG SVMIQRVNGS LAVSRALGDF DYKCVHGKGP TEQLVSPEPE VHDIERSEED DQFIIACDG IWDVMGNEEL CDFVRSRLEV TDDLEKVCNE VVDTCLYKGS RDNMSVILIC FPNAPKVS AE AVKKEAELDK YLENRVEEII KKQGEGVPLD VHMRTLASE NIPSLPPGGE LASKRNVIEA VYNRLNPYKN DDTDSASTDD MW
Source	E.coli
Target Names	Ppm1a
Protein Names	Recommended name: Protein phosphatase 1A EC= 3.1.3.16 Alternative name(s): Protein phosphatase 2C isoform alpha Short name= PP2C-alpha Protein phosphatase IA
Expression Region	2-382
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	This protein is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. This phosphatase dephosphorylates, and negatively regulates the activities of, MAP kinases and MAP kinase kinases. It has been shown to inhibit the activation of p38 and JNK kinase cascades induced by environmental stresses. This phosphatase can also dephosphorylate cyclin-dependent kinases, and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to G2/M cell cycle arrest and apoptosis. Three alternatively spliced transcript variants encoding distinct isoforms have been described.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.