



Recombinant Human Serine/threonine-protein phosphatase PP1-beta catalytic subunit (PPP1CB)

Product Code	CSB-EP018504HU
Relevance	Protein phosphatase that associates with over 200 regulatory proteins to form highly specific holoenzymes which dephosphorylate hundreds of biological targets. Protein phosphatase (PP1) is essential for cell division, it participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. Component of the PTW/PP1 phosphatase complex, which plays a role in the control of chromatin structure and cell cycle progression during the transition from mitosis into interphase. In balance with CSNK1D and CSNK1E, determines the circadian period length, through the regulation of the speed and rhythmicity of PER1 and PER2 phosphorylation. May dephosphorylate CSNK1D and CSNK1E. Dephosphorylates the 'Ser-418' residue of FOXP3 in regulatory T-cells (Treg) from patients with rheumatoid arthritis, thereby inactivating FOXP3 and rendering Treg cells functionally defective (PubMed:23396208).
Abbreviation	Recombinant Human PPP1CB protein
Storage	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.
Uniprot No.	P62140
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ADGELNVDLITRLLLEVRGCRPGKIVQMTEAEVRGLCIKSREIFLSQPILLELEA PLKICGDIHGQYTDLLRLFYGGFPPEANYLFLGDYVDRGKQSLETICLLLAYKI KYPENFFLLRGNHECASINRIYGFYDECKRRFNILWKTFTDCFNCLPIAAIVDE KIFCCHGGLSPDLQSMEQIRRIMRPTDVPDTGLLCDLLWSDPKDVKVQGWGEN DRGVSFTFGADVVSFLNRHDLDLICRAHQVVEDGYEFFAKRQLVTLFSAPNY CGEFDNAGGMMMSVDETLMCSFQILKPSEKKAKYQYGGGLNSGRPVTTPRTANP PKKR
Research Area	Signal Transduction
Source	E.coli
Target Names	PPP1CB
Protein Names	Recommended name: Serine/threonine-protein phosphatase PP1-beta catalytic subunit Short name= PP-1B Short name= PPP1CD EC= 3.1.3.16 EC= 3.1.3.53
Expression Region	2-327aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at



4°C for up to one week.

Tag Info

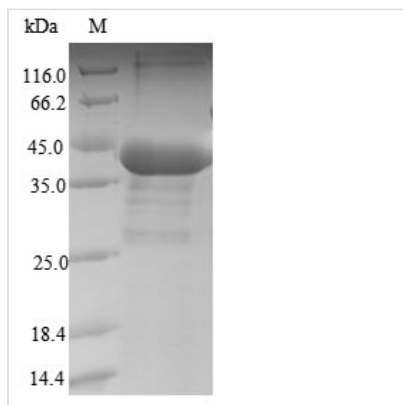
N-terminal 6xHis-tagged

Mol. Weight

41.1kDa

Protein Length

Full Length of Mature Protein

Image

(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

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

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