



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

<b>Product Code</b>	CSB-EP018504HU
<b>Relevance</b>	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).
<b>Storage</b>	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.
<b>Uniprot No.</b>	P62140
<b>Storage Buffer</b>	Tris-based buffer,50% glycerol
<b>Product Type</b>	Recombinant Protein
<b>Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	ADGELNVDLITRLLLEVRGCRPGKIVQMTEAEVRGLCIKSREIFLSQPILLELEA PLKICGDIHGQYTDLLRLFYGGFPPEANYLFLGDYVDRGKQSLETICLLLAYKI KYPENFFLLRGNHECASINRIYGFYDECKRRFNIKLWKTFTDCFNCLPIAAIVDE KIFCCHGGLSPDLQSMEQIRRIMRPTDVPDTGLLCDLLWSDPKDVKDVGWGEN DRGVSFTFGADVVSFLNRHDLDLICRAHQVVEDGYEFFAKRQLVTLFSAPNY CGEFDNAGGMMSVDETLMCSFQILKPSEKKAKYQYGGGLNSGRPVTTPRRTANP PKKR
<b>Research Area</b>	Signal Transduction
<b>Source</b>	E.coli
<b>Gene Names</b>	PPP1CB
<b>Protein Names</b>	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
<b>Expression Region</b>	2-327aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at



4°C for up to one week.

**Tag Info**

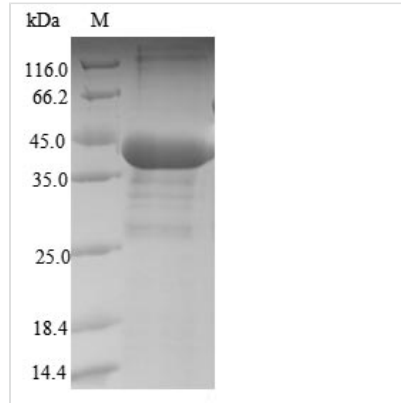
N-terminal 6xHis-tagged

**Mol. Weight**

41.1kDa

**Protein Description**

Full Length of Mature Protein

**Image**

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