

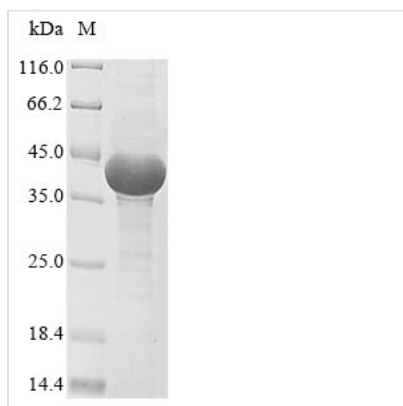


Recombinant Dog Serine/threonine-protein phosphatase PP1-alpha catalytic subunit (PPP1CA) (X155S,X158S)

Product Code	CSB-EP840958DO
Relevance	Protein phosphatase that associates with over 200 regulatory proteins to form highly specific holoenzymes which dephosphorylate hundreds of biological targets. Protein phosphatase 1 (PP1) is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. Involved in regulation of ionic conductances and long-term synaptic plasticity. May play an important role in dephosphorylating substrates such as the postsynaptic density-associated Ca ²⁺ /calmodulin dependent protein kinase II. 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. Regulates NEK2 function in terms of kinase activity and centrosome number and splitting, both in the presence and absence of radiation-induced DNA damage. Regulator of neural tube and optic fissure closure, and enteric neural crest cell (ENCCs) migration during development. 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 CENPA. Dephosphorylates the 'Ser-139' residue of ATG16L1 causing dissociation of ATG12-ATG5-ATG16L1 complex, thereby inhibiting autophagy
Abbreviation	Recombinant Dog PPP1CA protein (X155S,X158S)
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.	Q8WMS6
Storage Buffer	Tris-based buffer,50% glycerol
Product Type	Recombinant Proteins
Immunogen Species	Canis lupus familiaris (Dog) (Canis familiaris)
Purity	≥ 85% as determined by SDS-PAGE.
Sequence	SDSEKLNLDISIIGRLLEVQGSRPGKNVQLTENEIRGLCLKSREIFLSQPILLELEA PLKICGDIHGQYYDLLRLFYGGFPPESNYLFLGDYVDRGKQSLETICLLLAYKI KYPENFFLLRGNHECASINRIYGFYDECKRRYNIKLWKTFTDSFNSLPAAIVDE KIFCCHGGLSPDLQSMEQIRRIMRPTDVPDQGLLCDLLWSDPKDVKDVGWGEN DRGVSFTFGAEVVAKFLHKHDLDLICRAHQVVEDGYEFFAKRQLVTLFSAPNY CGEFDNAGAMMSVDETLMCSFQILKPADKNKGKYGQFSGLNPGGRPITPPRN SAKAKK



Research Area	Cancer
Source	E.coli
Target Names	PPP1CA
Protein Names	Recommended name: Serine/threonine-protein phosphatase PP1-alpha catalytic subunit Short name= PP-1A EC= 3.1.3.16
Expression Region	2-330aa(X155S,X158S)
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	42.3 kDa
Protein Length	Full Length of Mature Protein

Image


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

Shelf Life

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