

PPP1CA active protein

PPP1CA, 1-330aa, Human, His tag, E Coli (Bioactivity Validated)

CATALOG # AAA48757	HOST E Coli	APPLICATIONS SDS-Page
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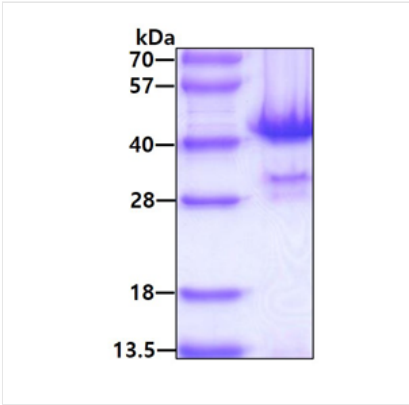
PRODUCT SYNONYMS

PPP1CA; 1-330aa; Human; His tag; E Coli (Bioactivity Validated); Serine/threonine-protein phosphatase PP1-alpha catalytic subunit; PP-1A; PP1alpha; PPP1A; PPP1CA active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	> 80% by SDS-PAGE
Form/Format	Liquid. 50mM Tris-HCl (pH 8.5), 0.2M NaCl, 1mM DTT, 0.1mM PMSF, 1mM MnCl ₂ , 50%glycerol
Concentration	0.2 mg/ml (determined by Bradford assay) (varies by lot)
Sequence	MGSSHHHHH SSGLVPRGSH MSDSEKLNLD SIIGRLLEVQ GSRPGKNVQL TENEIRGLCL KSREIFLSQP ILLELEAPLK ICGDIHGQYY DLLRLFYGG FPESNYLFL GDYVDRGQS LETICLLAY KIKYPENFFL LRGNHECASI NRIYGFYDEC KRRYNIKLWK TFTDCFNCLP IAAIVDEKIF CCHGGLSPDL QSMEQIRRM RPTDVPDQGL LCDLLWSDPD KDVQGWGEND RGVSTFTGAE VVAKFLHKHD LDLICRAHQV VEDGYEFFAK RQLVTLFSAP NYCGEFDNAG AMMSVDETLN CSFQILKPAD KNKGKYGQFS GLNPGGRPIT PPRNSAKAKK
Sequence Length	330
Applicable Applications for PPP1CA active protein	Enzyme Activity, SDS-PAGE
Tag Information	His-tag
Domain	1-330aa
Biological Activity	Specific activity: >3,000 units/mg. Enzymatic activity was confirmed by measuring the amount of enzyme hydrolyzing 1 nmole of p-nitrophenyl phosphate (pNPP) per minute at 37C, pH7.5 using 10mM of substrate.
Preparation and Storage	Can be stored at 2°C to 8°C for one week. For long term storage, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

IMAGES



SDS-PAGE
3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

ADDITIONAL INFORMATION

Related Product Information for PPP1CA active protein	PPP1CA, also known as serine/threonine-protein phosphatase PP1-alpha catalytic subunit, is essential for cell division, and participates in the regulation of glycogen metabolism, muscle contractility and protein synthesis. This protein may play an important role in dephosphorylating substrates such as the postsynaptic density-associated Ca2+/calmodulin dependent protein kinase II. Recombinant human PPP1CA protein, fused to His-tag at N-terminus, was expressed in E Coli and purified by using conventional chromatography.
Product Categories/Family for PPP1CA active protein	Enzymes & Proteases
References	He B., et al. (1997) Proc. Natl. Acad. Sci. u.S.A. 94:843-848.; Trinkle-Mulcahy L., et al. (2001) J. Cell Sci. 114:4219-4228.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506003
NCBI GeneID	5499
NCBI Accession #	NP_002699
NCBI GenBank Nucleotide #	NM_002708.3
UniProt Accession #	P62136; P08129; P20653; P22802; Q07161; A6NNR3; B2R908
Molecular Weight	39.7 kDa (350aa), confirmed by MALDI-TOF
NCBI Official Full Name	serine/threonine-protein phosphatase PP1-alpha catalytic subunit isoform 1
NCBI Official Synonym Full Names	protein phosphatase 1 catalytic subunit alpha
NCBI Official Symbol	PPP1CA
NCBI Official Synonym Symbols	PP1A; PP-1A; PPP1A; PP1alpha
NCBI Protein Information	serine/threonine-protein phosphatase PP1-alpha catalytic subunit
UniProt Protein Name	Serine/threonine-protein phosphatase PP1-alpha catalytic subunit
UniProt Gene Name	PPP1CA
UniProt Synonym Gene Names	PPP1A; PP-1A

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

