

Datasheet for ABIN7556655

PPP2CA Protein (AA 1-309) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	PPP2CA
Protein Characteristics:	AA 1-309
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PPP2CA protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Ppp2ca Protein expressed in mammalien cells.
Sequence:	<p>MDEKLFTKEL DQWIEQLNEC KQLSESQVKS LCEKAKEILT KESNVQEVRC PVTVCGDVHG</p> <p>QFHDLMELEFR IGGKSPDTNY LFMGDYVDRG YYSVETVTL VALKVRYRER ITILRGNHES</p> <p>RQITQVYGFY DECLRKYGNA NVWKYFTDLF DYLPALTALVD GQIFCLHGGL SPSIDTLDHI</p> <p>RALDRLQEVPE HEGPMCDLLW SDPDDRGWG ISPRGAGYTF GQDISETFNH ANGLTLVSRA</p> <p>HQLVMEGYNW CHDRNVVTIF SAPNYCYRCG NQAAIMELDD TLKYSFLQFD PAPRRGEPHV</p> <p>TRRTPDYFL Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</p>
Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none"> Made to order protein - from design to production - by highly experienced protein experts.

Product Details

- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	PPP2CA
Alternative Name:	Ppp2ca (PPP2CA Products)
Background:	<p>Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform (PP2A-alpha) (EC 3.1.3.16),FUNCTION: PP2A is the major phosphatase for microtubule-associated proteins (MAPs) (By similarity). PP2A can modulate the activity of phosphorylase B kinase casein kinase 2, mitogen-stimulated S6 kinase, and MAP-2 kinase (By similarity). Cooperates with SGO2 to protect centromeric cohesin from separase-mediated cleavage in oocytes specifically during meiosis I (PubMed:18084284). Can dephosphorylate p53/TP53 (By similarity). Activates RAF1 by dephosphorylating it at 'Ser-259' (By similarity). Mediates dephosphorylation of WEE1, preventing its ubiquitin-mediated proteolysis, increasing WEE1 protein levels, and promoting the G2/M checkpoint (By similarity). Mediates dephosphorylation of MYC, promoting its ubiquitin-mediated proteolysis: interaction with AMBRA1 enhances interaction between PPP2CA and MYC (PubMed:25438055). Mediates dephosphorylation of FOXO3, promoting its stabilization: interaction with AMBRA1 enhances interaction between PPP2CA and FOXO3 (By similarity). Catalyzes dephosphorylation of the pyrin domain of NLRP3, promoting assembly of the NLRP3 inflammasome (PubMed:28465465). Together with RACK1 adapter, mediates dephosphorylation of AKT1 at 'Ser-473', preventing AKT1 activation and AKT-mTOR signaling</p>

Target Details

pathway (PubMed:26974206, PubMed:33505023). Dephosphorylation of AKT1 is essential for regulatory T-cells (Treg) homeostasis and stability (PubMed:33505023).

{ECO:0000250|UniProtKB:P67775, ECO:0000269|PubMed:18084284, ECO:0000269|PubMed:25438055, ECO:0000269|PubMed:26974206, ECO:0000269|PubMed:28465465, ECO:0000269|PubMed:33505023}.

Molecular Weight: 35.6 kDa

UniProt: [P63330](#)

Pathways: [PI3K-Akt Signaling](#), [Mitotic G1-G1/S Phases](#), [Hepatitis C](#), [Toll-Like Receptors Cascades](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months