

Product datasheet for AR09801PU-S

OriGene Technologies, Inc.

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PPP3CA / Calcineurin A (1-511, His-tag) Human Protein

Product data:

Product Type: Recombinant Proteins

Description: PPP3CA / Calcineurin A (1-511, His-tag) human recombinant protein, 10 μg

Species: Human E. coli **Expression Host:**

Expression cDNA Clone

or AA Sequence:

MGSSHHHHHH SSGLVPRGSH TGSMSEPKAI DPKLSTTDRV VKAVPFPPSH RLTAKEVFDN

DGKPRVDILK AHLMKEGRLE ESVALRIITE GASILRQEKN LLDIDAPVTV CGDIHGQFFD LMKLFEVGGS

PANTRYLFLG DYVDRGYFSI ECVLYLWALK ILYPKTLFLL RGNHECRHLT EYFTFKQECK IKYSERVYDA CMDAFDCLPL AALMNQQFLC VHGGLSPEIN TLDDIRKLDR FKEPPAYGPM CDILWSDPLE

DFGNEKTQEH FTHNTVRGCS YFYSYPAVCE FLQHNNLLSI LRAHEAQDAG YRMYRKSQTT GFPSLITIFS APNYLDVYNN KAAVLKYENN VMNIRQFNCS PHPYWLPNFM DVFTWSLPFV

GEKVTEMLVN VLNICSDDEL GSEEDGFDGA TAAARKEVIR NKIRAIGKMA RVFSVLREES ESVLTLKGLT

PTGMLPSGVL SGGKQTLQSA IKGFSPQHKI TSFEEAKGLD RINERMPPRR DAMPSDANLN

SINKALTSET NGTDSNGSNS SNIQ

Tag: His-tag Predicted MW: 60 kDa Concentration: lot specific

>85% **Purity:**

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 0.2M NaCl, 5 mM DTT, 1 mM EDTA,

20% glycerol

Preparation: Liquid purified protein

Protein Description: Recombinant human PPP3CA protein, fused to His-tag at N-terminus, was expressed in E.coli

and purified by using conventional chromatography techniques.

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Storage:

Avoid repeated freezing and thawing.

Shelf life: one year from despatch. Stability:

RefSeq: NP 000935

Locus ID: 5530





UniProt ID: Q08209

Cytogenetics: 4q24

Synonyms: CALNA, CNA, PP2B catalytic subunit, protein phosphatase 2B catalytic subunit alpha

Summary: Calcium-dependent, calmodulin-stimulated protein phosphatase which plays an essential

role in the transduction of intracellular Ca(2+)-mediated signals (PubMed:15671020,

PubMed:18838687, PubMed:19154138, PubMed:23468591). Many of the substrates contain a PxIxIT motif and/or a LxVP motif (PubMed:17498738, PubMed:17502104, PubMed:23468591,

PubMed:27974827, PubMed:22343722). In response to increased Ca(2+) levels,

dephosphorylates and activates phosphatase SSH1 which results in cofilin dephosphorylation

(PubMed:15671020). In response to increased Ca(2+) levels following mitochondrial depolarization, dephosphorylates DNM1L inducing DNM1L translocation to the mitochondrion (PubMed:18838687). Dephosphorylates heat shock protein HSPB1 (By similarity). Dephosphorylates and activates transcription factor NFATC1 (PubMed:19154138). In response to increased Ca(2+) levels, regulates NFAT-mediated transcription probably by dephosphorylating NFAT and promoting its nuclear translocation (PubMed:26248042).

Dephosphorylates and inactivates transcription factor ELK1 (PubMed:19154138).

Dephosphorylates DARPP32 (PubMed:19154138). May dephosphorylate CRTC2 at 'Ser-171' resulting in CRTC2 dissociation from 14-3-3 proteins (PubMed:30611118).[UniProtKB/Swiss-

Prot Function]

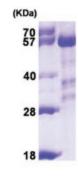
Protein Families: Druggable Genome, Phosphatase

Protein Pathways: Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Axon guidance, B cell

receptor signaling pathway, Calcium signaling pathway, Long-term potentiation, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Oocyte meiosis, T cell receptor

signaling pathway, VEGF signaling pathway, Wnt signaling pathway

Product images:



15% SDS-PAGE (3ug)