

# Datasheet for ABIN7546809 CSRP3 Protein (AA 1-194) (His tag)



#### Overview

Quantity:	1 mg
Target:	CSRP3
Protein Characteristics:	AA 1-194
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CSRP3 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details	
Purpose:	Custom-made recombinat CSRP3 Protein expressed in mammalien cells.
Sequence:	MPNWGGGAKC GACEKTVYHA EEIQCNGRSF HKTCFHCMAC RKALDSTTVA AHESEIYCKV CYGRRYGPKG IGYGQGAGCL STDTGEHLGL QFQQSPKPAR SVTTSNPSKF TAKFGESEKC PRCGKSVYAA EKVMGGGKPW HKTCFRCAIC GKSLESTNVT DKDGELYCKV CYAKNFGPTG IGFGGLTQQV EKKE 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.
Characteristics:	<ul> <li>Key Benefits:</li> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalien cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> </ul>

• 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: CSRP3

Alternative Name: CSRP3 (CSRP3 Products)

Background:

Cysteine and glycine-rich protein 3 (Cardiac LIM protein) (Cysteine-rich protein 3) (CRP3) (LIM

domain protein, cardiac) (Muscle LIM protein),FUNCTION: Positive regulator of myogenesis. Acts as a cofactor for myogenic bHLH transcription factors such as MYOD1, and probably MYOG and MYF6. Enhances the DNA-binding activity of the MYOD1:TCF3 isoform E47 complex and may promote formation of a functional MYOD1:TCF3 isoform E47:MEF2A complex involved in myogenesis (By similarity). Plays a crucial and specific role in the organization of cytosolic structures in cardiomyocytes. Could play a role in mechanical stretch sensing. May be a scaffold protein that promotes the assembly of interacting proteins at Z-line structures. It is essential for calcineurin anchorage to the Z line. Required for stress-induced calcineurin-NFAT activation (By similarity). The role in regulation of cytoskeleton dynamics by association with CFL2 is reported conflictingly. Shown to enhance CFL2-mediated F-actin depolymerization dependent on the CSRP3:CFL2 Molecular ratio, and also shown to reduce the ability of CLF1 and CFL2 to enhance actin depolymerization (PubMed:19752190, PubMed:24934443). Proposed to contribute to the maintenance of muscle cell integrity through an actin-based mechanism. Can directly bind to actin filaments, cross-link actin filaments into bundles without polarity selectivity and protect them from dilution- and cofilin-mediated depolymerization, the

function seems to involve its self-association (PubMed:24934443). In vitro can inhibit

PKC/PRKCA activity (PubMed:27353086). Proposed to be involved in cardiac stress signaling

by down-regulating excessive PKC/PRKCA signaling (By similarity).

 $\{ ECO: 0000250 | UniProtKB: P50462, ECO: 0000250 | UniProtKB: P50463, ECO: 0000250 | UniProtKB: P50462, ECO: 0000250 | UniProtKB: P50462, ECO: 0000250 | UniProtKB: P50463, ECO: 0000250 | UniProtKB: 0000250 | UniProt$ 

ECO:0000269|PubMed:19752190, ECO:0000269|PubMed:24934443,

ECO:0000269|PubMed:27353086}., FUNCTION: [Isoform 2]: May play a role in early sarcomere organization. Overexpression in myotubes negatively regulates myotube differentiation. By association with isoform 1 and thus changing the CSRP3 isoform 1:CFL2 stoichiometry is

proposed to down-regulate CFL2-mediated F-actin depolymerization.

{ECO:0000269|PubMed:24860983}.

Molecular Weight:

21.0 kDa

UniProt:

P50461

### **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