

Product datasheet for MR228416

Csrp3 (NM 001198841) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Csrp3 (NM_001198841) Mouse Tagged ORF Clone

Tag: Myc-DDK

Symbol: Csrp3

Synonyms: CRP3; MLP; MMLP

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>MR228416 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCCAAACTGGGGTGGAGGTGCAAAATGTGGAGCCTGTGAAAAGACGGTCTACCATGCAGAAGAAATCC
AGTGCAATGGGAGGAGTTTCCACAAGACCTGTTTCCACTGCATGGCCTGCAGGAAAGCTCTGGACAGCAC
CACAGTGGCAGCTCATGAGTCAGAGATCTACTGTAAGGTGTGCTATGGGCGCAGGTATGGCCCCAAGGGG
ATCGGGTTCGGACAAGGCGCTGGCTGCCTCAGCACAGACACTGGCGAGCATCTTGGCCTGCAGTTCCAAC
AATCCCCAAAGCCAGCTCGAGCACCACAAGCAACCCTTCCAAATTCTCTGCAAAGTTTGGAGAATC
AGAGAAGTGCCCACGATGTGGAAAGTCGGTATACGCTGCTGAGAAGGTCATGGGAGGTGGCAAGCCCTGG
CACAAGACCTGCTTCCGCTGTGCCATCTGTGGGAAGAGCCTGGAGTCTACAAATGTCACTGACAAGGATG
GGGAGCTCTACTGCAAAGTTTGCTATGCCAAAAATTTTGGCCCCCACAGGCATTGGGTTTGGAGGGCTTAC

ACAGCAAGTGGAAAAGAAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA**

Protein Sequence: >MR228416 protein sequence

Red=Cloning site Green=Tags(s)

MPNWGGGAKCGACEKTVYHAEEIQCNGRSFHKTCFHCMACRKALDSTTVAAHESEIYCKVCYGRRYGPKG IGFGQGAGCLSTDTGEHLGLQFQQSPKPARAATTSNPSKFSAKFGESEKCPRCGKSVYAAEKVMGGGKPW

 ${\tt HKTCFRCAICGKSLESTNVTDKDGELYCKVCYAKNFGPTGIGFGGLTQQVEKKE}$

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

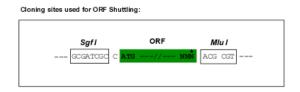
CN: techsupport@origene.cn

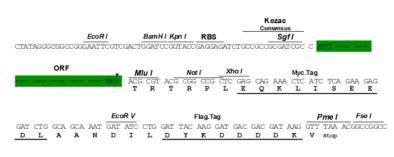
Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001198841

ORF Size: 585 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 001198841.1</u>, <u>NP 001185770.1</u>

 RefSeq Size:
 1035 bp

 RefSeq ORF:
 585 bp

 Locus ID:
 13009

 UniProt ID:
 P50462



Cytogenetics:

7 B4

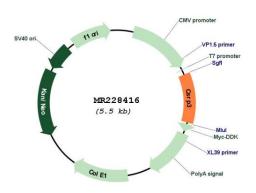
MW:

20.9 kDa

Gene Summary:

Positive regulator of myogenesis. Acts as 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 (PubMed:9039266, PubMed:15665106). The role in regulation of cytoskeleton dynamics by association with CFL2 is reported conflictingly. Proposed to contribute to the maintenance of muscle cell integerity 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 cofilinmediated depolymerization; the function seems to involve its self-association (By similarity). In vitro can inhibit PKC/PRKCA activity. Proposed to be involved in cardiac stress signaling by down-regulating excessive PKC/PRKCA signaling (PubMed:27353086).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR228416