

Product datasheet for RC222092

C9orf114 (SPOUT1) (NM_016390) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	C9orf114 (SPOUT1) (NM_016390) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	C9orf114
Synonyms:	C9orf114; CENP-32; CENP32; HSPC109
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222092 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGAGCGCGCAGGAAGCGGCCGTGCGGCCGGGTGAACACGGCCAAAGGATTGAGTGCGGAAAAT
GGAAGCAACAGAAGAAAGAGGAGAAAAAATGGAAGGATCTCAAGCTGATGAAAAACTGGAGCGGCA
CGGGGCACAGGAGAACAGGCAAAGCGCCTGGAAGAGGAGGAGGCAGCGGCAGAGAAGGAGGACCGCGG
CGGCCCTACACACTGAGCGTAGCCCTGCCGGGCTCCATCCTGGACAATGCTCAGTCGCCGGAGCTTCGCA
CCTACTTGGCCGGTCAGATTGCCAGAGCCTGTGCCATCTTCTGTGTGGATGAGATCGTGGTGTGATGA
GGAGGGCCAGGATGCCAAGACTGTGGAGGGGAATTCAGAGGAGTTGGGAAGAAGGGGCAGCGCTGCGTA
CAGCTGGCCCGGATCCTGCACTACCTGGAGTGTCCACAGTACCTGAGGAAGGCGTTCTTCCCAAGCACC
AGGATCTACAGTTTGAGGGCTCCTGAACCCCTGGACAGCCCCACCACATGCGTCAGGATGAGGAATC
CGAGTTCGAGAGGGCATCGTGGTGGATCGGCCACCCGGCCAGGCCACGGCTCCTTTGTCAACTGTGGC
ATGAAAAGGAGGTGAAGATTGACAAGAACCTGGAGCCCGGGCTTCGGGTGACTGTGCGACTGAACCAGC
AGCAGCACCCAGACTGCAAGACCTACCATGGCAAAGTGGTATCATCGCAGGACCTCGCACCAAAGCTGG
TCTCTACTGGGGCTACACCGTCCGACTGGCTTCTGCCTCAGTGTGTGTTTGTGAGGCCCCCTCCAA
GATGGGTATGACCTGACCATCGGGACGTCAGAGCGGGCTCAGATGTGGCTTCTGCCAGTTCACCACT
TCAGGCATGCTTGTGGTGTTCGGGGGCTCCAGGGTCTGGAAGCTGGAGCGGATGCTGACCCCAACT
GGAGGTGGCTGAACCCAGTGTCTCTTTGACCTGTACGTAACCTGTCTGGCCAGGGTAGCCGTACC
ATCCGCACGGAGGAAGCCATCCTCATCTCCCTGGCCGCCCTGCAGCCTGGCTCATCCAGCGGGTGCC
GGCACACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222092 protein sequence
Red=Cloning site Green=Tags(s)

MAERGRKRPCGPGEGHQRIEWRKWKQKKEKKKWKDLKLMKKLERQRAQEEQAKRLEEEEEAAEKEDRG
 RPYTLSVALPGSILDNAQSPELRTYLAGQIARACAIFCVDEIVVFDEEGQDAKTVEGFRGVGKKGQACV
 QLARILQYLECPQYLKRAFFPKHQDLQFAGLLNPLDSPHHMRQDEESEFREGIVVDRPTRPGHGSFVNCG
 MKKEVKIDKNLEPGLRVTVRLNQQQHPDCKTYHGKVVSSQDPRTKAGLYWGYTVRLASCLSAVFAEAPFQ
 DGYDLTIGT SERGSDVASAQLPNFRHALVVF GGLQGLEAGADADPNLEVAEPSVLFDLYVNTCPGQGSRT
 IRTEEAILISLAALQPGLIQAGARHT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6731_c07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_016390

ORF Size: 1128 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: [NM_016390.4](#)

RefSeq Size: 4302 bp

RefSeq ORF: 1131 bp

Locus ID: 51490

UniProt ID: [Q5T280](#)

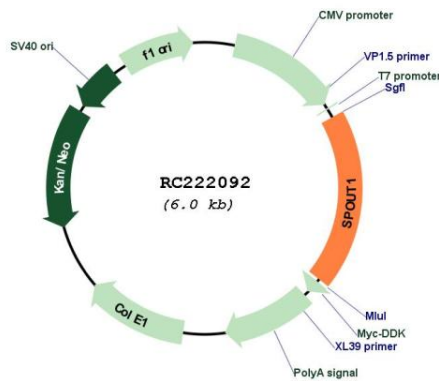
Cytogenetics: 9q34.11

Protein Families: Druggable Genome

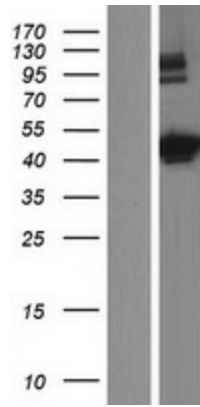
MW: 42.1 kDa

Gene Summary: Required for association of the centrosomes with the poles of the bipolar mitotic spindle during metaphase (PubMed:20813266, PubMed:25657325). Also involved in chromosome alignment (PubMed:20813266). May promote centrosome maturation probably by recruiting A-kinase anchor protein AKAP9 to centrosomes in early mitosis (PubMed:25657325). Binds specifically to miRNA MIR145 hairpin, regulates MIR145 expression at a postranscriptional level (PubMed:28431233).[UniProtKB/Swiss-Prot Function]

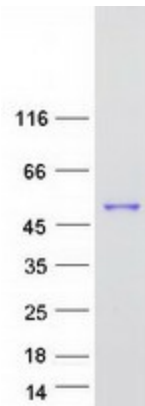
Product images:



Circular map for RC222092



Western blot validation of overexpression lysate (Cat# [LY413993]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222092 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SPOUT1 protein (Cat# [TP322092]). The protein was produced from HEK293T cells transfected with SPOUT1 cDNA clone (Cat# RC222092) using MegaTran 2.0 (Cat# [TT210002]).