

Product datasheet for **RC205825**

ARHGEF14 (MCF2L) (NM_024979) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ARHGEF14 (MCF2L) (NM_024979) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ARHGEF14
Synonyms:	ARHGEF14; DBS; OST
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205825 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACGGTGCGCCGGCTGTCACTGCTGTGCCGGGACCTCTGGGCGCTGTGGCTGCTGCTGAAGGCCGGCG
 CAGATGAAATCATGCACAGGACATCGTCCCGCTCTGTGCTGCCGACATCCAGGACCAGCTAAAGAAGCG
 CTTTGCTTACCTGTCCGGTGGGCGGGGAGGACGGAAGCCGGTTATCACCTTCCCTGACTACCGGCC
 TTCAGCGAGATCCGGACAAGGAGTTCCAGAATGTCATGACCTACCTCACCAGCATCCCCAGCCTGCAGG
 ACGCTGGCATCGGATTCATCCTGGTGATAGACCGGCGACGGGACAAATGGACCTCCGTGAAGGCGTCCGT
 CCTGCGCATCGCAGCATCTTCCCGGCAAACCTGCAGCTCGTCCCTCGTGCTTCGCCCAGCGGTTTTTC
 CAAAGGACTCTCTCCGACATCGCTTTCAAATTCATAGAGATGACTTTAAGATGAAGGTGCCGGTCATAA
 TGCTGAGCTCCGTACCAGACTTACACGGTTACATCGATAAGTCGACGCTGACCGAGGACCTGGGTGGGAC
 CCTGGACTACTGCCACTCCCGGTGGCTGTGCCAGCGCACGGCCATCGAAAGTTTCGCCCTCATGGTGAAG
 CAGACGGCTCAGATGCTGCAGTCCTTCGGGACCGAGCTGGCTGAAACAGAGCTGCCCAATGACGTCCAGT
 CGACAAGCTCAGTGCTGTGTGCGCACACAGAGAAGAAGGACAAGGCGAAGGAGGATTTGAGGCTGGCACT
 GAAAGAGGGGCACAGTGTCTGGAGAGCCTCAGGAGCTGCAGGCTGAGGGCTCAGAGCCCAGTGTGAAC
 CAGGACCAGCTTGACAACAGGCCACCGTGCAGAGGCTCCTGGCCAGCTGAACGAAACCGAGGCTGCCT
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 CTTCCGGGAGGTCAAAGCCATCTTGAGCGCAGCGTCCCAGAAGATAGCAACCTTCACAGACATCGGCAAC
 AGCCTGGCGCATGTGGAGCACCTGCTGAGGGACCTGGCCAGCTTCGAGGAGAAATCAGGCGTGGCCGTGG
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 ACCTGCTGGCCTCACAACCTGTGACAAGTGCCAGTCCCAGGACGGCGCGGAGGCTGCCCTCCAGGAAAT
 CGAGAAGTTTTTGAGACCGGTGCGGAAAATAAGATCCAGGAGCTCAACGCGATTTACAAGGAATACGAA


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TCCATCCTCAACCAAGATCTCATGGAGCACGTGCGAAAGGTCTTCCAGAAGCAGGCAAGCATGGAGGAGG
TGTTCCACCGCAGGCAGGCCAGCCTGAAGAAGCTGGCGGCCAGGCAGACGCGGCCGTGCAGCCGGTGGC
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CCTGGACACAGAACGGGCTACGTGGAGGAGCTGCTGTGCGTCTGGAGGGCTACGCCGCGGAGATGGAT
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AGGAAATCTATCACTTCCACAACAGGATATTCCTCAGGGAGCTGGAAAACCTACACTGACTGCCAGAACT
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TGCCCTGCCGGCCCCGACCAGCACCAGTCCCTCAAGAGGAACTCAAGGAACATCAAGAAGCTGGAAGA
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GGCAAAGAGCCC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205825 protein sequence
Red=Cloning site Green=Tags(s)

MTVRRLLSLLCRDLWALLKAGADEIMHQDIVPLCAADIQDQLKKRFAYLSGGRGQDGSPIVITFPDYPA
FSEIPDKEFQNVMTYLTSLPSLQDAGIGFILVIDRRDKWTSVKASVLRIAASFPANLQLVLVRPTGFF
QRTLSDIAFKFNRRDFKMKVPVIMLSSVPLHGYIDKSQLTEDLGGTLDYCHSRWLCQRTAIESFALMVK
QTAQMLQSFGETELAETELPNDVQSTSSVLCAHTEKKDKAKEDLRLALKEGHSVLESRLQAESEPSVN
QDQLDNQATVQRLLAQLNETEAADEFWAKHQKLEQCLQLRHFEQGFREVKAILEDASQKIATFTDIGN
SLAHVEHLLRDLASFEEKSGVAVERARALSLDGEQLIGNKHYAVDSIRPKCQELRHLCDQFSAEIRRRG
LLSKSLELHRRLETSMKWCDEGIYLLASQPVDKCQSDGAEALQEIEKFLETGAENKIQELNAIYKEYE
SILNQDLMEHVRKVFQKQASMEEVFHRQASLKKLAARQTRPVQPVAPRPEALAKSPCSPGIRRGSENS
SSEGGALRRGPYRRAKSEMSESRQGRGSAGEEEESLAILRRHVMSELLDTERAYVEELLVLEGYAAEMD
NPLMAHLLSTGLHNKDVLFNMEEIYHFHNRIFLRELENYTDCPELVGRCFLERMEDFQIYEKCYQNKP
RSESLWRQSDCPFFQECQKRLDHKLSLDSYLLKPVQRITKYQLLLKEMLKYSRNCGEADLQEALESSIL
GILKAVNDMHLIAITGYDGNLGDGLKLLMQGSFSVWTDHKGHTKVKELARFKPMQRHLFLHEKAVLFC
KKREENEGEYKAPSYSYKQSLNMAAVGITENVKGDAAKFEIWNAREEVYIVQAPTPEIKAAWNIEIRK
VLTSQLQACREASQHRALEQSLSLPLAPTSTSPSRGNSRNIKKLEERKTDPLELEGYVSSAPLTKPPEK
GKEP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6292_d09.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_024979

ORF Size: 2952 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.

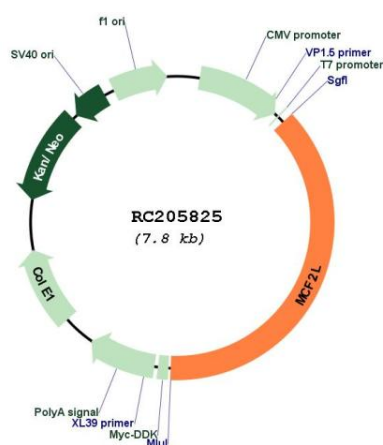
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_024979.2](#), [NP_079255.2](#)

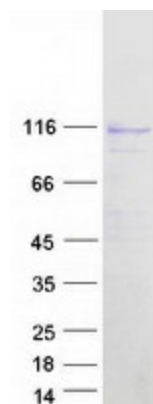
RefSeq Size: 6456 bp

RefSeq ORF:	3372 bp
Locus ID:	23263
UniProt ID:	<u>O15068</u>
Cytogenetics:	13q34
MW:	111.9 kDa
Gene Summary:	This gene encodes a guanine nucleotide exchange factor that interacts specifically with the GTP-bound Rac1 and plays a role in the Rho/Rac signaling pathways. A variant in this gene was associated with osteoarthritis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2016]

Product images:



Circular map for RC205825



Coomassie blue staining of purified MCF2L protein (Cat# [TP305825]). The protein was produced from HEK293T cells transfected with MCF2L cDNA clone (Cat# RC205825) using MegaTran 2.0 (Cat# [TT210002]).