

Product datasheet for RC205660

CYRIB (NM_016623) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYRIB (NM_016623) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYRIB
Synonyms:	BM-009; CYRI; CYRI-B; FAM49B; L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205660 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGAATCTTCTTAAAGTTTTGACATGCACAGACCTTGAGCAGGGGCCAAATTTTTCTTGATTTTG
AAAATGCCAGCCTACAGAGTCTGAGAAGGAAATTTATAATCAGGTGAATGTAGTATTAAGATGCAGA
AGGCATCTTGAGGACTTGCAGTCATACAGAGGAGCTGGCCACGAAATACGAGAGGCAATCCAGCATCCA
GCAGATGAGAAGTTGCAAGAGAAGGCATGGGTGCAGTTGTTCCACTAGTAGGCAAAATTAAGAAATTTT
ACGAATTTCTCAGAGGTTAGAAGCAGCATTAAAGAGGTCTTCTGGGAGCCTTAACAAGTACCCCATATTC
TCCACCCAGCATCTAGAGCGAGAGCAGGCTCTTGCTAAACAGTTGCAGAAATCTTCATTTCACACTC
CGGTTTGATGAACTCAAGATGACAAATCCTGCCATACAGAATGATTTTCAGCTATTATAGAAGAACATTGA
GTCGTATGAGGATTAACAATGTACCGGCAGAAGGAGAAAATGAAGTAAATGAATGGCAAATCGAAT
GTCTTTGTTTTATGCTGAGGCAACTCCAATGCTGAAAACCTTGAGTGATGCCACAACAAAATTTGTATCA
GAGAATAAAAATTTACCAATAGAAAATACCACAGATTGTTAAGCACAATGGCTAGTGTATGCAGAGTCA
TGCTGGAACACCGGAATACAGAAGCAGATTTACAAATGAAGAGACAGTGTCATTCTGCTTGAGGGTAAT
GGTGGGTGTCATAACTCTATGACCACGTACATCCAGTGGGAGCATTGCTAAAACCTCCAAAATTTGAT
ATGAAAGGTTGTATCAAAGTTCTTAAGGACCAACCTCCTAATAGTGTGGAAGGTCTTCTAAATGCTCTCA
GGTACACAACAAAACATTTGAATGATGAGACTACCTCCAAGCAAATTAATCCATGCTGCCAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC205660 protein sequence
Red=Cloning site Green=Tags(s)

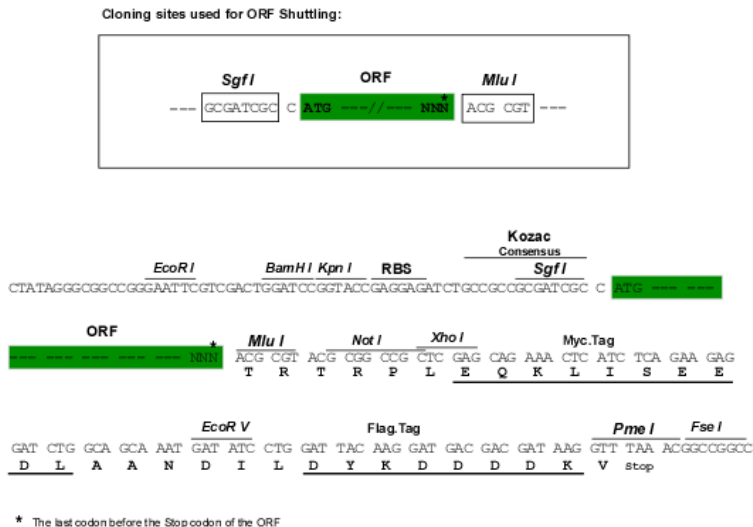
MGNLLKVLCTDLEQGNFFLDFENAQPTSEKEIYNQVNVVLKDAEGILEDLQSYRGAGHEIREAIQHP
 ADEKLQEKAWGAVVPLVGKLLKFYEFSQLRLEAALRGLLGALTSTPYSPTQHLEREQALAKQFAEILHFTL
 RFDELKMTNPAIQNDFSYRRTL SRMRINNVPAEGENEVNNELANRMSLFYAEATPMLKTLSDATTKFVS
 ENKNLPIENTDCLSTMASVCRVMLETPEYRSRFTNEETVSVFLRVMGVVIILYDHVHPVGAF AKTSKID
 MKGCIKVLKDQPPNSVEGLLNALRYTTKHLNDETTSKQIKSMLQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6720_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_016623

ORF Size: 972 bp

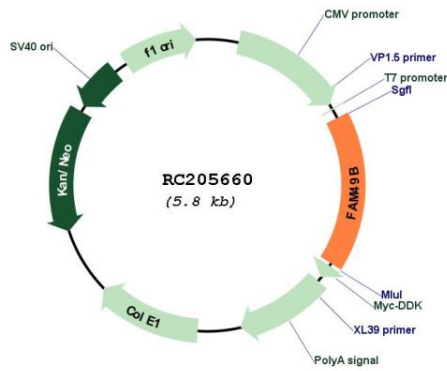
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

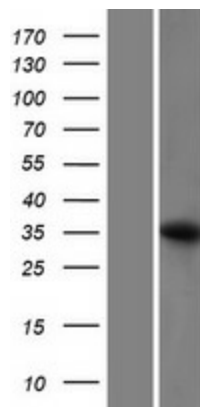
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_016623.5
RefSeq Size:	3838 bp
RefSeq ORF:	975 bp
Locus ID:	51571
UniProt ID:	Q9NUQ9
Cytogenetics:	8q24.21
MW:	36.7 kDa
Gene Summary:	Negatively regulates RAC1 signaling and RAC1-driven cytoskeletal remodeling (PubMed:31285585, PubMed:30250061). Regulates chemotaxis, cell migration and epithelial polarization by controlling the polarity, plasticity, duration and extent of protrusions. Limits Rac1 mediated activation of the Scar/WAVE complex, focuses protrusion signals and regulates pseudopod complexity by inhibiting Scar/WAVE-induced actin polymerization (PubMed:30250061). Protects against Salmonella bacterial infection. Attenuates processes such as macropinocytosis, phagocytosis and cell migration and restrict sopE-mediated bacterial entry (PubMed:31285585). Restricts also infection mediated by Mycobacterium tuberculosis and Listeria monocytogenes (By similarity). Involved in the regulation of mitochondrial dynamics and oxidative stress (PubMed:29059164).[UniProtKB/Swiss-Prot Function]

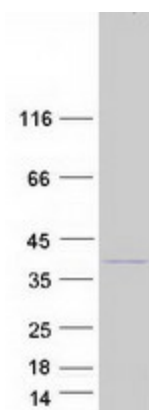
Product images:



Circular map for RC205660



Western blot validation of overexpression lysate (Cat# [LY413876]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205660 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FAM49B protein (Cat# [TP305660]). The protein was produced from HEK293T cells transfected with FAM49B cDNA clone (Cat# RC205660) using MegaTran 2.0 (Cat# [TT210002]).