

Product datasheet for **RG205660**

CYRIB (NM_016623) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	CYRIB
Synonyms:	BM-009; CYRI; CYRI-B; FAM49B; LI
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG205660 representing NM_016623
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGAATCTTCTTAAAGTTTGGACATGCACAGACCTTGAGCAGGGGCCAAATTTTTCTTGATTTTG
AAAATGCCAGCCTACAGAGTCTGAGAAGGAAATTTATAATCAGGTGAATGTAGTATTAAGATGCAGA
AGGCATCTTGGAGGACTTGCAGTCATACAGAGGAGCTGGCCACGAAATACGAGAGGCAATCCAGCATCCA
GCAGATGAGAAGTTGCAAGAGAAGGCATGGGGTGCAGTTGTTCCACTAGTAGGCAAAATTAAGAAATTTT
ACGAATTTTCTCAGAGGTTAGAAGCAGCATTAAAGAGGTCTTCTGGGAGCCTTAACAAGTACCCCATATTC
TCCACCCAGCATCTAGAGCGAGAGCAGGCTCTTGCTAAACAGTTTGCAGAAATTTCTCATTTTCACTC
CGGTTTGATGAACCAAGATGACAAATCCTGCCATACAGAATGATTTAGCTATTATAGAAGAACATTGA
GTCGATGAGGATTAACAATGTACCGGCAGAAGGAGAAAATGAAGTAAATGAATTGGCAATCGAAT
GTCTTTGTTTTATGCTGAGGCAACTCCAATGCTGAAAACCTTGAGTGATGCCACAACAAATTTGTATCA
GAGAATAAAATTTACCAATAGAAAATACCACAGATTGTTTAAGCACAATGGCTAGTGATGCAGAGTCA
TGCTGGAAACACCGGAATACAGAAGCAGATTTACAAATGAAGAGACAGTGTCATTCTGCTTGAGGGTAAT
GGTGGGTGTCAATACTCTATGACCACGTACATCCAGTGGGAGCATTGCTAAACTTCCAAATTTGAT
ATGAAAGGTTGTATCAAAGTTCTTAAGGACCAACCTCCTAATAGTGTTGGAAGGTCTTCTAAATGCTCTCA
GGTACACAACAAACATTTGAATGATGAGACTACCTCCAAGCAATTAATCCATGCTGCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG205660 representing NM_016623
Red=Cloning site Green=Tags(s)

MGNLLKVLCTDLEQGNFFLDFENAPTESEKEIYNQVNVVLKDAEGILEDLQSYRGAGHEIREAIQHP
ADEKLQEKAWGAVVPLVGKLLKFYEFSQLLEAALRGLLGALTSTPYSPTQHLEREQALAKQFAEILHFTL
RFDELKMTNPAIQNDFSYRRTL SRMRINNVP AEGENEVNNELANRMSLFYAEATPMLKTLSDATTKFVS
ENKNLP IENTTDCLSTMASVCRVMLETPEYRSRFTNEETVSFCLRVMGV IILYDHVHPVGAFAKTSKID
MKGC IKVLKDQPPNSVEGLLNALRYTTKHLNDETTSKQIKSMLQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT

- - E E R V Stop

ACCN: NM_016623

ORF Size: 972 bp

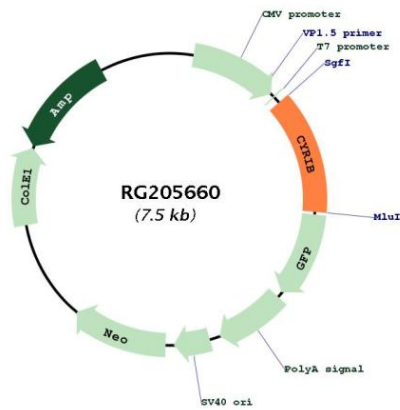
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	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:	<u>NM_016623.5</u>
RefSeq Size:	2219 bp
RefSeq ORF:	975 bp
Locus ID:	51571
UniProt ID:	<u>Q9NUQ9</u>
Cytogenetics:	8q24.21
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 RG205660