

Product datasheet for **RG228252**

CGREF1 (NM_001166239) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	CGREF1
Synonyms:	CGR11
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG228252 ORF sequence, **codon optimized**.
Due to the complexity of NM_001166239, the ORF clone is codon optimized for mammalian Expression.
The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCCTCTGACCATGACCGTACTCATCCTGCTCCTTCTCCCCACCGCCAAGCCGCCCTAAAGACG
GGGTGACTCGGCCGATTCTGAAGTCCAGCATCAACTGCTGCCAAACCCCTTCAACCCGGTCAGGAGCA
ACTGGGTCTGCTTCAGTCCTACCTGAAGGCCCTGGGTAGAACCAGGTGCAGCTGGAGCACCTGTCTAGG
GAGCAAGTCCCTTCTGTATCTGTTTGCCTTGCATGATTACGACCAGTCAGGCCAGCTGGATGGCTTGAAC
TGTTGAGTATGCTACCGCCGCACTGGCTCCAGGGGAGCAAAACAGCCCAACCAAAACCCCTGTTATTCT
GATCGTTGATAAGGTGCTGGAGACACAGGACCTGAACGGTATGGGTGATGACTCCAGCAGAATTGATA
AACTTCCCGGGTGTGCCCTTAGACACGTTGAGCCTGGCGAACCCCTGGCACCTCCACAGGAGCCCC
AAGCCGTGGGACGGCAATCTCTGCTTGAAGTCAACCCCTGAGACAGGAAACGAGGAGGCTCCTGGCCC
CAGGGAGGAAGCTAAGGGCCAAGTTGAAGCTAGGCGCAATCACTTGACCCCGTGCAGGAGCCCGCGGC
CAGGCGGAAGCCGACGGCGATGTCCCGGCCCGAGGCGAGGCTGAGGACAGGCGGAGGCAAAAGGAG
ACGCCCCAGGACCTCGCGGAGAAGCTGGGGGCGAGGCTGAGGCTGAAGGTATGCACAGGGCCGAGAGG
CGAAGCAGGCGGACAGGCGGAAGCCGAAGGCGATGCGCCCGGGCCTCGCGGGGAGGCAGGCGGACAAGCT
GAGGCCAGAGAAAATGGCGAGGAAGCGAAAGAGTTGCCTGGCGAGACTCTGGAGAGCAAAAATACCCAGA
ACGATTTTGAAGTGCACATAGTACAAGTAGAAAATGATGAAATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG228252 representing NM_001166239

Red=Cloning site Green=Tags(s)

MLPLTMTVLILLLLPTGQAAPKDGVTDPSEVQHQLLPNPFQPGQEQLGLLQSYLKGLGRTEVQLEHLSE
EQVLLYLFAHLDYDQSGQLDGLELLSMLTAALAPGAANSPTTNPVILIVDKVLETQDLNGDGLMTPAELI
NFPGVALRHVEPGEPLAPSPQEPQAVGRQSLLAKSPLRQETQEAPGPREEAKGQVEARRESLDPVQEPGG
QAEADGDVPGPRGEAEGQAEAKGDAPGPRGEAGQAEAGDAPGPRGEAGGQAEAGDAPGPRGEAGGQA
EARENGEEAKELPGETLESKNTQNDFEVHIVQVENDEI

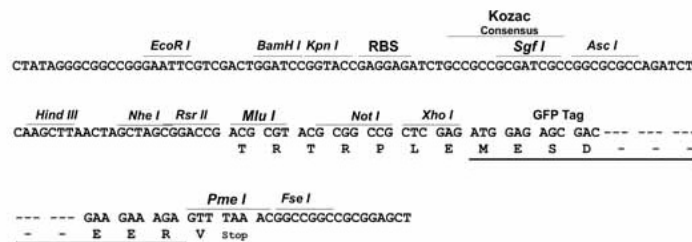
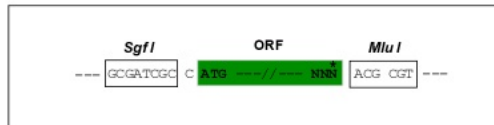
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN:

NM_001166239

ORF Size:

954 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_001166239.1](#), [NP_001159711.1](#)

RefSeq Size: 1783 bp

RefSeq ORF: 957 bp

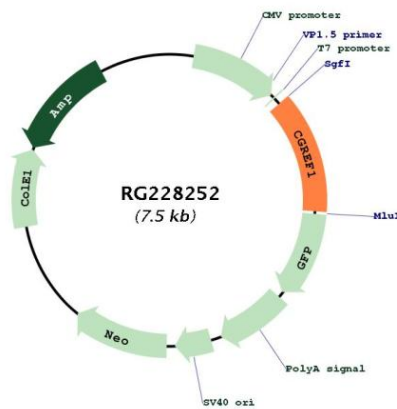
Locus ID: 10669

UniProt ID: [Q99674](#)

Cytogenetics: 2p23.3

Gene Summary: Mediates cell-cell adhesion in a calcium-dependent manner (By similarity). Able to inhibit growth in several cell lines.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG228252