

Product datasheet for **RG214858**

RTCD1 (RTCA) (NM_003729) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RTCD1 (RTCA) (NM_003729) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RTCD1
Synonyms:	RPC; RTC1; RTCD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214858 representing NM_003729 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGGGCGCGGGTGGAGGTCGATGGCAGCATCATGGAAGGGGCGGCCAGATCCTGAGAGTCTCTA
 CGGCCTTGAGCTGTCTCCTAGGCCTCCCCTTGCGGGTGCAGAAGATCCGAGCCGGCCGAGCACGCCAGG
 CCTGAGGCCTCAACATTTATCTGGACTGGAATGATTGAGATTTGTGTGATGGCAACTGGAGGGGCA
 GAAATTGGCTCAACAGAAATAACCTTTACACCAGAGAAGATCAAAGGTGGAATCCACACAGCAGATACCA
 AGACAGCAGGGAGTGTGTGCCTCTTGATGCAGGTCTCAATGCCGTGTGTTCTCTTTGCTGCTTCTCCATC
 AGAACTTCATTTGAAAGGTGGAATAATGCTGAAATGGCACCACAGATCGATTATACAGTGATGGTCTTC
 AAGCCAATTGTTGAAAAATTTGGTTTCATATTTAATTGTGACATTAACAAGGGGATATTACCCAAAAG
 GGGGTGGTGAAGTGATTGTTGCAATGTCACCAGTTAAACAATTGAACCTATAAATTTAACTGAGCGTGG
 CTGTGTGACTAAGATATATGGAAGAGCTTTCGTTGCTGGTGTGTTTGCCATTTAAAGTAGCAAAAGATATG
 GCAGCGGCAGCAGTTAGATGCATCAGAAAGGAGATCCGGGATTTGTATGTTAACATCCAGCCTGTCAAG
 AACCTAAAGACCAAGCATTGGAATGGAATGGAATAATAATTATTGCTGAGACCTCCACTGGCTGTTT
 GTTTGCTGGATCATCGCTTGGTAAACGAGGTGTAATGCAGACAAAGTTGAATTGAAGCTGCCGAAATG
 CTATTAGCAAATCTTAGACATGGTGGTACTGTGGATGAGTATCTGCAAGACCAGCTGATTGTTTTCATGG
 CATTAGCCAATGGAGTTTCCAGAATAAAAAACAGGACAGTTACACTCCATACGCAAAACCGGATACATTT
 TGCTGAACAAATAGCAAAGGCTAAATTTATTGTGAAGAAATCAGAAGATGAAGAAGACGCCGCTAAAGAT
 ACTTATATTATTGAATGCCAAGGAATTGGGATGACAAATCCAATCTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >RG214858 representing NM_003729
 Red=Cloning site Green=Tags(s)

MAGPRVEVDGSIMEGGGQILRVSTALSCLLGLPLRVQKIRAGRSTPGLRPQHLSGLEMIRDLCDGQLEGA
 EIGSTEITFTPEKIKGGIHTADTKTAGSVCLLMQVSMPCVLFAASPSSELHLKGGTNAEMAPQIDYTMVF
 KPIVEKFGFIFNCDIKTRGYYPKGGGEIVRMSPVKQLNPINLTERGCVTKIYGRAFVAGVLPFKVAKDM
 AAAAVRCIRKEIRDLYVNIQPVQEPKDQAFGNGNGIIIIAETSTGCLFAGSSLGKRGVNADKVGIEAAEM
 LLANLRHGGTVDEYLDQQLIVFMALANGVSRITGPTVLTHTQTAIHFAEQIAKAKFIVKKSEDEEDAARD
 TYIECQGIGMTNPNL

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_003729

ORF Size: 1098 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_003729.4](#)

RefSeq Size: 1539 bp

RefSeq ORF: 1101 bp

Locus ID: 8634

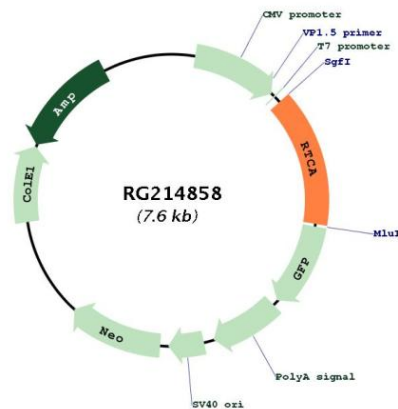
UniProt ID: [O00442](#)

Cytogenetics: 1p21.2

Domains: RTC

Gene Summary: This gene encodes a member of the RNA 3'-phosphate cyclase family. The encoded protein plays a role in RNA metabolism by catalyzing the ATP-dependent conversion of the 3'-phosphate of RNA substrates to a 2',3'-cyclic phosphodiester. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Feb 2012]

Product images:



Circular map for RG214858