

Product datasheet for **MG216840**

Rragd (NM_027491) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rragd (NM_027491) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rragd
Synonyms:	5730543C08Rik; AI467523; C030003H22Rik; D4ErtD174e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG216840 representing NM_027491 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCCAAGTGCTGGGCAAGCCGAGCCGAGGGTGAGGACGGCGGCGAGGACGAGGAGGAGGATGAGC
TGGTGGGGCTGGCGGGCTACGAGGATGGGCCGAGTCTCGGACGCCGAGCTGGACAGCGGGCCGGAGGA
GGGAGTTCTGGACTTCAGCGACCCCTTCAGCACTGAGGTGAAGCCAGAATCCTGCTCATGGGTCTCAGG
AGGAGCGGCAAGTCGTCTATCCAGAAAGTCGTCTTTCACAAAATGTCCCGAGCGAGACGCTGTTCTTGG
AGAGCACCAACAGGATCTGCCGGGAAGAGCTCTCCAACAGCTCCTTCGTCAACTTCCAGATTTGGGACTT
CCCAGGGCAGATTGACTTTTTTACCCCTACCTTTGACTATGAGATGATCTTCCGGGAACCGGGGCACTG
ATCTTCGTCATCGACTCCAGGATGACTATATGGAAGCGCTGGCCCGGCTCCATCTCACAGTGACCAGGG
CCTACAAGGTGAACACTGATATCAACTTTGAGGTGTTTATTATAAAGTAGATGGTCTGTGATGACCA
CAAAATTGAAACCCAGAGAGACATTCACCAGAGGGCAAACGATGACCTCGCTGATGCTGGATTAGAAAA
ATTCACCTGAGCTTTTACCTGACAAGCATATATGATCATTCAATATTTGAAGCCTTTAGCAAAGTGGTTC
AGAAACTGATCCACAGCTCCCGACGCTGGAGAATCTGCTGAACATCTTTATCTCAAATCTGGAATTGA
GAAAGCGTTTCTGTTTGACGTGGTCAGTAAGATTTATATTGCAACCGACAGCACGCCGGTGGACATGCAG
ACGTACGAGCTCTGCTGTGACATGATTGACGTGGTGATCGACATCTTTGATTTATGGTCTCAAAGAAG
ATGGAGCAGGAGCCCGTATGACAAGGACTCAACAGCCATTATAAAGCTGAATAATAACAAGTCTTTTA
TTTAAAAGAGGTCACAAAGTTCTTGGCGCTCGTTTCTCGTCAGAGAGGAAAGCTTTGAAAGAAAAGGG
CTGATTGACTATAATTTCCACTGCTTCCGGAAGGCCATCCATGAAGTCTTCGAGGTGAGGATGAAGATGG
TGAAATCTCGAAAGGCCAGAGTCGGCTACCCAAGAAGACAGGAGCTACTCCAATGGGACCCCTAGAGT
GCTGCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG216840 representing NM_027491
Red=Cloning site Green=Tags(s)

MSQVLGKPPQGEDGGDEEEDELVGLAGYEDGPESDAELDSGPEEGVLDVSDPFSTEVKPRILLMGLR
 RSGKSSIQKVVVHKMSPSETLFLLESTNTRICREDVSNSSFVNFQIWFDFPGQIDFFDPTFDYEMIFRGTGAL
 IFVIDSQDDYMEALARLHLTVTRAYKVNTDINFEVFIHKVDGLSDDHKIETQRDIHQRANDDLADAGLEK
 IHL SFYLT SIYDHSIFEAF SKVVQKLIPQLPTLENLLNIFISNSGIEKAF LFDVVSKIYIATDSTPVDMQ
 TYELCCDMIDVVIDI SCYGLKEDGAGAPYDKDSTAI IKLNNTTVLYLKEVTKFLALVCFVREESFERKG
 LIDYNFHCFRKAIHEVFEVRMKMVKSRAQSR LPKKTGATPNGT PRVLL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_027491

ORF Size: 1197 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_027491.2](#), [NP_081767.2](#)

RefSeq Size: 5047 bp

RefSeq ORF: 1200 bp

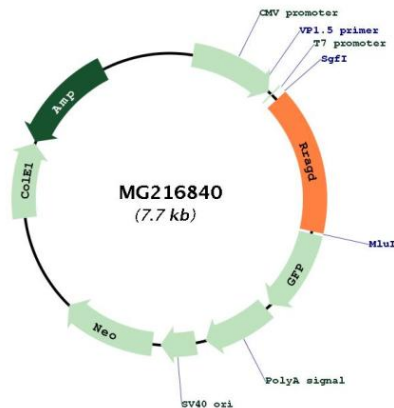
Locus ID: 52187

UniProt ID: [Q7TT45](#)

Cytogenetics: 4 14.57 cM

Gene Summary: Guanine nucleotide-binding protein forming heterodimeric Rag complexes required for the amino acid-induced relocalization of mTORC1 to the lysosomes and its subsequent activation by the GTPase RHEB. This is a crucial step in the activation of the TOR signaling cascade by amino acids (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG216840