

Product datasheet for **MG207524**

Rtn2 (NM_013648) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Rtn2 (NM_013648) Mouse Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | Rtn2 |
| Synonyms: | MMS10-P; Ms10p; Nspl1; NSPLI |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>MG207524 representing NM_013648
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGCAGGTCCTGCCGTCTTCGCCACTGCAAAGAAGCTCCATCTACAGCCTTTCTACCCCGATT
 CCACGGAAGGAGGAATGACGACTCAGATTTTCGGGAGCTGCACACAGCCCGGAATTCTCAGAGGATGA
 AGAGGAGGAGACCACATCGCAGGACTGGGGCACCCCCAGGGAGCTGACCTTTTCTACATTGCCTTCGAC
 GGCGTGGTGGGCTCTGGGGGCCGTAGGGACTCAGTTGTTTCGTCGTCGCCGGCCCGAGGGACGTTCACTCT
 CAGAACCACGGGACCCACCCCAACAGTCCGGCTGGGTGACAGCTTGAAAGCATCCCTAGCCTGAGCCA
 GTCCCCAGAGCCAGGGCCCGCGGTGACCCTGACCCCGTCCAGCTGAGCGCCCGCTGGAGGAACTG
 AGGCTGCGGCTGGACCAGCTTGGCTGGTTGTCCGGAGTCCGGGATCTGGGGAGGATTCCGCCACCAGCA
 GCTCCACCCCTCTGAAAATGAGGAGCCTGATGGATTGGAGGCCAGCGAGGCTGGAGAAGAGACGAATCT
 GGAAGTCCGACTTGCTCAGTCTCTACATTTGCAACTTGAGGTCTGACTCCTCAACTTAGCCCTAGCTCC
 GGGACCCCGCAGGCGCATCTCCATCCCAACAAGATCTCAAGATTCGAACTCCGGTCTGATGATGAGC
 CTCTGCTGAATGTGGTAGAAGAGCATTGGCGGCTGCTGGAGCAGGAGCCAATCACGGCCAGTGCCTCGA
 TAGCACAGACCAATCAGAATTCATGTTGGAGCCGCTCCTTCTAGTGGCAGACCTGTTGACTGGAAGGAC
 ACCAGGACGTCGGGAGCGGTCTTACGGGCCTCATGGCCTCTCTCCTCTGCCTCTGCACCTTAGCATCG
 TGTCCGTGGTGCACCTGGCCCTGTTGGGTCTCTGCGCCACCATCTCTCTCAGGGTTTACCGCAAAGT
 GCTGCAGGCCGTGACCCGGGCGACGGCACCAACCCTTCCAGGCCTACCTGGACATGGACCTGACCCTG
 ACTCGGGAGCAGACAGACGTTTGTCCCAGCAGATCGCCTCCACGTGGTCTCCACAGCCACACAGCTAC
 GGCATTTCTCTAGTGGAGACCTGGTGGATTCTCTCAAGCTGGCTCTCTCTTCTACATCTTGACCTT
 TGTGGGAGCCATCTTCAACGGCTTGACTTTGTTCATCCTAGGAGTGGTTGCTTTGTTTACCGTCCCTT
 CTGTACAGACAACATCAGGCCAGATTGACCAGTATGTGGGGTTGGTGACCAATCAGTTGAGCCACATCA
 AAGCTAAGATCCGAGCTAAGATCCCGGGGACCGGAACCTTGCCCAACAGCATCAGTCTCCGGATCCAA
 AGCCAAAGCCGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG207524 representing NM_013648
 Red=Cloning site Green=Tags(s)

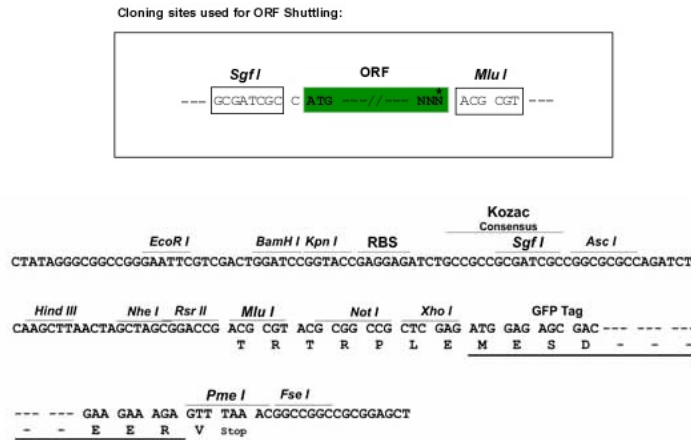
MGQVLPVFAHCKEAPSTASSTPDSTEGGNDSDFRELHTAREFSEDEEEETTSQDWGTPRELTFSYIAFD
 GVVGSGRRDSVRRPRPQGRSVSEPRDPPQSGLGDSLESIPSLQSPEPGRRGDPDPVPPAERPLEEL
 RLRLDQLGWVRSAGSGEDSATSSSTPLENEEPDGLSEAGEETNLELRLAQSLHLQLEVLTPQLSPSS
 GTPQAHTPSPQRSQDSNSGPDDEPLLNVEEHWRLLQEPIITAQCLDSTDQSEFMLEPLLLVADLLYWKD
 TRTSGAVFTGLMASLLCLLHFSIVSVAHLALLGLCATISLRVYRKVLQAVHRGDGTNPFQAYLDMDLTL
 TREQTERLSQQIASHVVSTATQLRHFFLVEDLVDSLKALLFYILTFVGAIFNGLTLVILGVVALFTVPL
 LYRQHQAIQDYVGLVTNQLSHIKAKIRAKIPGTGLAPTASVSGSKAKAE

TRTRPLE - GFP Tag - V

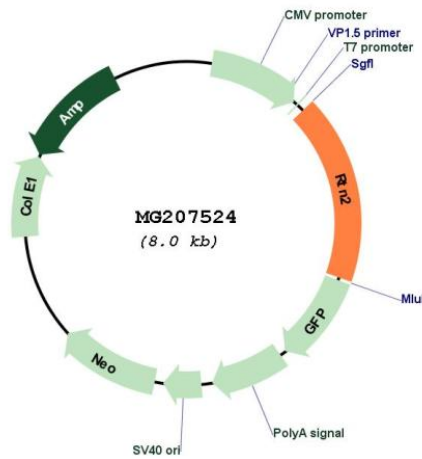
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_013648

ORF Size: 1413 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_013648.6](#)

RefSeq Size: 1947 bp

RefSeq ORF: 1416 bp

Locus ID: 20167

UniProt ID: [O70622](#)

Cytogenetics: 7 9.54 cM

Gene Summary: Inhibits amyloid precursor protein processing, probably by blocking BACE1 activity (By similarity). Enhances trafficking of the glutamate transporter SLC1A1/EAAC1 from the endoplasmic reticulum to the cell surface (By similarity). Plays a role in the translocation of SLC2A4/GLUT4 from intracellular membranes to the cell membrane which facilitates the uptake of glucose into the cell (PubMed:19720795).[UniProtKB/Swiss-Prot Function]