

Product datasheet for **MG220154**

Rtn2 (NM_001025364) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rtn2 (NM_001025364) 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)
ORF Nucleotide Sequence: >MG220154 representing NM_001025364
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGGGAGTAAAGTGGCAGACCTGTTGTACTGGAAGGACACCAGGACGTCGGGAGCGGTCTTCACGGGCC
TCATGGCCTCTCCTCTGCCTCTGCCTTAGCATCGTGTCCGTGGCTGCGCACCTGGCCCTGTTGGG
TCTCTGCGCCACCATCTCTCAGGGTTTACCGCAAAGTCTGCAGGCCGTGCACCGGGCGACGGCACC
AACCCCTTCCAGGCTACCTGGACATGGACCTGACCCCTGACTCGGGAGCAGACAGAACGTTTGTCCAGC
AGATCGCCTCCCACGTGGTCTCCACAGCCACACAGCTACGGCATTCTTCTAGTGAAGACCTGGTGA
TTCTCTCAAGCTGGCTTCTCTTCTACATCTTGACCTTTGTGGGAGCCATCTTCAACGGCTTGACTCTT
GTCATCTAGGAGTGGTTGCTTTGTTTACCGTCCCTCTCTGTACAGACAACATCAGGCCAGATTGACC
AGTATGTGGGGTTGGTGACCAATCAGTTGAGCCACATCAAAGCTAAGATCCGAGCTAAGATCCCGGGGAC
CGGAACCTTGCCCAACAGCATCAGTCTCCGGATCCAAAGCCAAAGCCGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG220154 representing NM_001025364
Red=Cloning site Green=Tags(s)

MGSKVADLLYWKDTRTSGAVFTGLMASLLCLLHFSIVSVAHLALLGLCATISLRVYRKVLQAVHRGDGT
NPFQAYLDMDLTLTREQTERLSQQIASHVVSTATQLRHFFLVEDLVDSLKALLFYILTFVGAIFNGLTL
VILGVVALFTVPLLYRQHQAIQYVGLVTNQLSHIKAKIRAKIPGTGLAPTASVSGSKAKAE

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_001025364

ORF Size: 612 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_001025364.3](#), [NP_001020535.1](#)

RefSeq Size: 1080 bp

RefSeq ORF: 615 bp

Locus ID: 20167

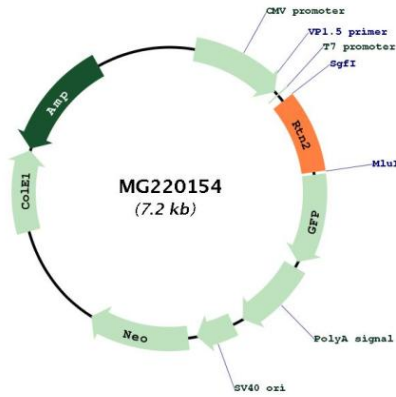
UniProt ID: [O70622](#)

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]

Product images:



Circular map for MG220154