

Product datasheet for **MG219201**

Znrf1 (NM_001168622) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Znrf1 (NM_001168622) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Znrf1
Synonyms: B830022L21Rik; nin283; Rnf42; Zrfp1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG219201 representing NM_001168622
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGGGGCAAGCAGAGCACGGCGGCCCGCTCTCGGGGCCCTCCCGGGGTCTCTACGGATGACAGCG
 CCGTGCCGCCCGGGAGGGGCGCCCACTTTGGGCACTACCGGACGGCGGGGGCGATGGGGCTGCG
 CAGCCGCTCGGTACGCTCGGTGGCGGCATGGGCATGGACCCAGCACGGCCGGAGGGTGCCTTTAGT
 CTCTACACCCCGCTCCCGGGACCGCGACTCCGAGAGGGCGCGGGCGGGAGGGTCCACGTCGG
 ACTCCACCTATGCCACGCAATGGTTACCAAGAGACCGCGCGGTACCATAGAGACGGGATGCTGTA
 CCTGGGCTCCCGAGCCTCGCTGGCGGATGCTCTACCTCTGCACATCGCACCCAGGTGGTTCAGCTCGCAC
 AGTGATGATGTGCTGACTAAAGATGCGGGTGAGTGTGTGATCTGCCTGGAGGAGCTGCTCAGGGGGACA
 CGATAGCCAGGCTGCCTGCCTGTGCATCTATCACAAAAGCTGCATAGACTCATGGTTTGAAGTGAACAG
 ATCTTGTCCAGAGACCCTGCTGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG219201 representing NM_001168622
 Red=Cloning site Green=Tags(s)

MGGKQSTAARSRGPFPVSTDDSAVPPPGGAPHFHGYRTGGGAMGLRSRSVSSVAGMGMDPSTAGGVPFS
 LYTPASRGTGDSERAPGGGGSTSDSTYAHNGYQETGGGHRDGMPLYLSRASLADALPLHIAPRWFSSH
 SDDVLTkdAGECVICLEELLQGDtiARLPCLCIYHKSCIDSWFEVNRSCPEHPAD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



Cloning Scheme:


ACCN: NM_001168622

ORF Size: 585 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_001168622.2](#)

RefSeq Size: 5466 bp

RefSeq ORF: 588 bp

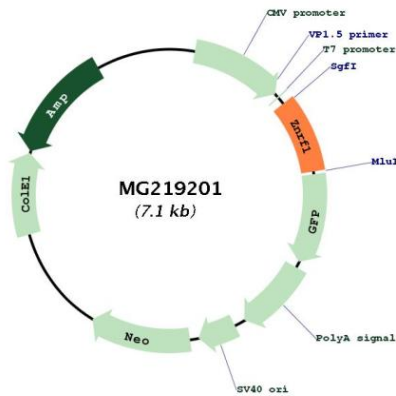
Locus ID: 170737

UniProt ID: [Q91V17](#)

Cytogenetics: 8 E1

Gene Summary:

E3 ubiquitin-protein ligase that mediates the ubiquitination of AKT1 and GLUL, thereby playing a role in neuron cells differentiation. Plays a role in the establishment and maintenance of neuronal transmission and plasticity. Regulates Schwann cells differentiation by mediating ubiquitination of GLUL. Promotes Wallerian degeneration, a neurodegeneration disorder, by mediating 'Lys-48'-linked polyubiquitination and subsequent degradation of AKT1 in axons: degradation of AKT1 prevents AKT1-mediated phosphorylation of GSK3B, leading to GSK3B activation and phosphorylation of DPYSL2/CRMP2 followed by destabilization of microtubule assembly in axons.[UniProtKB/Swiss-Prot Function]

Product images:

Circular map for MG219201