

Product datasheet for MR202714

Znrf1 (NM_001168621) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Znrf1 (NM_001168621) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Znrf1
Synonyms:	B830022L21Rik; nin283; Rnf42; Zrfp1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202714 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGGCAAGCAGAGCACGGCGGCCCTCTCGGGGCCCTCCCGGGGTCTCTACGGATGACAGCG
CCGTGCCCGCCGGGAGGGGCGCCCACTTTGGGCACTACCGGACGGCGGGGGCGATGGGGCTGCG
CAGCCGCTCGGTGAGCTCGGTGGCGGCATGGGCATGGACCCAGCACGGCCGGAGGGTGCCTTTAGT
CTCTACACCCCGCTCCCGGGACCGGCGACTCCGAGAGGGCGCGGGCGGGAGGGTCCACGTCGG
ACTCCACCTATGCCACGCAATGGTTACCAAGAGACCGGCGGGTACCATAGAGACGGGATGCTGTA
CCTGGGCTCCCGAGCCTCGCTGGCGGATGCTCTACCTCTGCACATCGCACCCAGGTGGTTCAGCTCGCAC
AGTGGTTTCAAGTGCCCCATTTGTTCCAAGTCTGTGGCTCCGATGAGATGGAATGCACTTTATAATGT
GTCTGAGCAAGCCTCGCCTGTCTACAATGATGATGTGCTGACTAAAGATGCGGGTGAGTGTGTGATCTG
CCTGGAGGAGCTGCTTCAGGGGGACACGATAGCCAGGCTGCCTTGCTGTGCATCTATCACAAAAGCTGC
ATAGACTCATGGTTTGAAGTGAACAGATCTTGCCAGAGCACCTGCTGAC

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR202714 protein sequence
Red=Cloning site Green=Tags(s)

MGGKQSTAARSRGPFPGVSTDDSAVPPPGGAPHF GHYRTGGGAMGLRSRSVSSVAGMGMDPSTAGGVPFS
 LYTPASRGTGDSERAPGGGGSTSDSTYAHNGYQETGGGHRDGM LYLGSRASLADALPLHIAPRWFSSH
 SGFKCPICSKSVASDEMEMHFIMCLSKPRLSYNDVLT KDAGECVICLEELLQGD TIARLPCLCIYHKSC
 IDSWFEVNRSCPEHPAD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_001168621

ORF Size: 684 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_001168621.2](#)

RefSeq Size: 4451 bp

RefSeq ORF: 684 bp

Locus ID: 170737

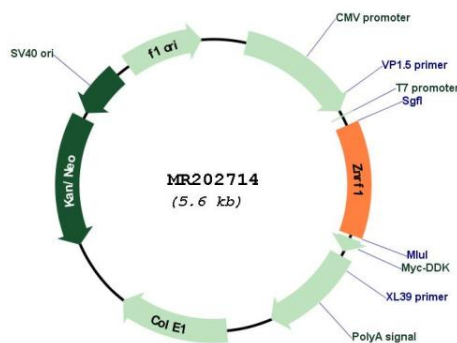
UniProt ID: [Q91V17](#)

Cytogenetics: 8 E1

MW: 23.8 kDa

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 MR202714