

Product datasheet for **RR204317**

Tnfrsf21 (NM_001108207) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tnfrsf21 (NM_001108207) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tnfrsf21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RR204317 representing NM_001108207
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGACCTCCGCAAGCAGCATCACCGCCTCGCCTCTTGCAGCCGCATCGCCGCCAAGTTGGAGCCA
CGATGGTCGCCGGCTCCCTTCTTGTGGGTTCCCTCAGCACCATCACAGCCCAACCAGAACAAAAGAC
TCTGAGTCTCACGGGCACGTACCGCCACGTTGACCGTACCACTGGCCAGGTGCTAACCTGCGACAAGTGT
CCGGCAGGAACGTATGTCTCCGAGCACTGTACCAACACGAGCCTGCGAGTCTGCAGCAGCTGCCCTCGG
GGACCTTTACCAGGCATGAGAACGGCATAGAGAGATGCCATGACTGTAGTCAGCCATGCCACGGCCGAT
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AGCCACACGGACTGTCTGGGTGAGAACCTGATGGTGGTCAAGCAGGGGACTAAGGAGACAGACAACGTC
TGTGGCGTGCACCTGTCTCCTCCAGCAGACCCCATCTTCCCCTGGCATAGCTACCTTTTCTCCTCCTG
AGCACACGGAATCCCACGATGTCCCTCCTCCACCTATGAGCCCCAAGGCATGAACCAACAGATTTCAA
CTCTACTGCCTCTGTTAGAACTAAGGTACCAAGTGACATCCAGGAAGAGACAGTGCCTGACAATACAAGC
TCCACGAGTGGGAAGGAGAGCAGCAACAGGACCCTGCCAAACCCACCACAACCTTACCACCAGCAAGGCC
CCCACCACAGACACATTTGAAGCTGCTGCCATCATCCATGGAGGCCACTGGTGAGAAGTCCAGCACAGC
CATCAAGCCCCAAGAGGGGCCATCCCAGACAGAACCCACACAAGCATTTCGACATCAACGAGCATTTG
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CTAGGACTCTCAAGAAGGGGCCCGGCAGGATCCAGTGCCATCATGGAAAAGGCAGGGTGAAGAAGTC
CTTGACTCCAACCCAGAACCGGGAGAAATGGATCTACTACCGCAATGGCCACGGTATTGACATCCTGAAG
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CATCCGGGGCCCTGAGGCCAGCCTTGCTCAGCTCATCAGCGCCTTGCGCCAGCACCGACGCAATGATGTT
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GAATCCGGAAGAGCTGCGGGTAATCGAAGAGATTTCCCAGGCTGAGGACAACTGGACCGTCTCTTCGAG
ATCATTGGGGTCAAGAGCCAAGAAGCCAGCCAGACCCTTTGGACTCTGTGTACAGCCATCTTCTGACC
TATTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR204317 representing NM_001108207
 Red=Cloning site Green=Tags(s)

MGTSASSITALASCRIAGQVGMVAGSLLLLGFLSTITAQPEQKTLTLTGTYRHVDRTTGQVLTCDKC
 PAGTYVSEHCTNTSLRVCSSCPSGTFTRHENGIERCHDCSQPCPRPMIERLPCAALTDREICPPGMYQS
 NGTCAPHTVCPVGVGVRKKGTENEDVRCKQCARGTFSDVPSSVMKCRHTDCLGQNLMVVKQGTKETDNV
 CGVHLSSSSTTPSSPGIATFSHPEHTESHVDVPSSTYEPQGMNSTDSNSTASVRTKVPSDIQEETVPDNTS
 STSGKESTNRTLNPQPQLTHQQGPHRHILKLLPSSMEATGEKSSTAIAKAPKRGHPRQNPCHKFDINEHL
 PWMIVLFLLLVLIVVCSIRKSSRTLKKGPRQDPSAIMEKAGLKKSLTPTQNREKWIYYRNGHGIDILK
 LVAAQVGSQWKDIYQFLCNASEREVAASFNGYTADHERAYAALQHWIRGPEASLAQLISALRQHRNDV
 VEKIRGLMEDTTQLETDKLALPMSPLSPSPIPSNVKLENSTLLTVEPSPLDKNKGFFVDESEPLLRC
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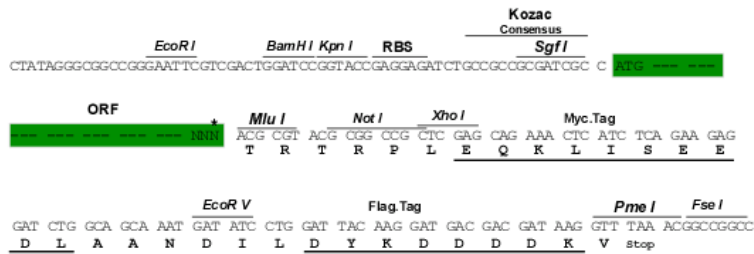
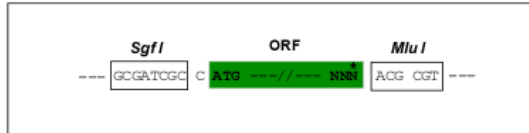
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2107_e11.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001108207

ORF Size: 1965 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001108207.1](#), [NP_001101677.1](#)

RefSeq Size: 4350 bp

RefSeq ORF: 1968 bp

Locus ID: 316256

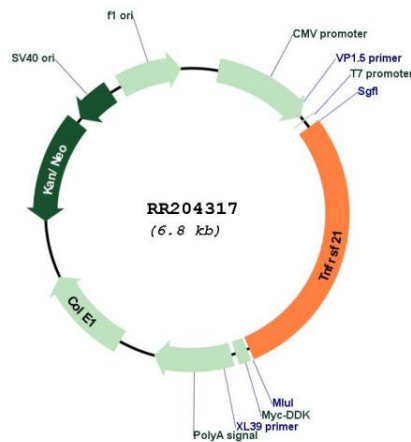
UniProt ID: [D3ZF92](#)

Cytogenetics: 9q13

MW: 72.3 kDa

Gene Summary:

Promotes apoptosis, possibly via a pathway that involves the activation of NF-kappa-B. Can also promote apoptosis mediated by BAX and by the release of cytochrome c from the mitochondria into the cytoplasm. Plays a role in neuronal apoptosis, including apoptosis in response to amyloid peptides derived from APP, and is required for both normal cell body death and axonal pruning. Trophic-factor deprivation triggers the cleavage of surface APP by beta-secretase to release sAPP-beta which is further cleaved to release an N-terminal fragment of APP (N-APP). N-APP binds TNFRSF21; this triggers caspase activation and degeneration of both neuronal cell bodies (via caspase-3) and axons (via caspase-6). Plays a role in signaling cascades triggered by stimulation of T-cell receptors, in the adaptive immune response and in the regulation of T-cell differentiation and proliferation. Negatively regulates T-cell responses and the release of cytokines such as IL4, IL5, IL10, IL13 and IFNG by Th2 cells. Negatively regulates the production of IgG, IgM and IgM in response to antigens. May inhibit the activation of JNK in response to T-cell stimulation (By similarity). Negatively regulates oligodendrocyte survival, maturation and myelination.[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for RR204317