

Product datasheet for **RG228663**

TNIK (NM_001161565) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TNIK (NM_001161565) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TNIK
Synonyms:	MRT54
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG228663 representing NM_001161565 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGAGCGACTCCCCGGCTCGAAGCCTGGATGAAATAGATCTCTCGGCTCTGAGGGACCCCGCAGGGA
TCTTTGAATTGGTGAACCTGTTGGAAATGGAACATACGGCAAGTTTATAAGGGTCGCATGTCAAAC
GGGCCAGCTTGCAGCCATCAAGTTATGGATGTCACAGGGGATGAAGAGGAAGAAATCAAACAAGAAAT
AACATGTTGAAGAAATATCTCATACCCGAATATTGCTACATACTATGGTGCTTTTATCAAAAAGAACC
CACCAGGCATGGATGACCAACTTTGGTTGGTGATGGAGTTTTGTGGTGCTGGCTCTGTCACCGACCTGAT
CAAGAACACAAAAGGTAACACGTTGAAAGAGGAGTGGATTGCATACATCTGCAGGGAAATCTACGGGG
CTGAGTCACTGCACCAGCATAAAGTGATTCATCGAGATATTAAGGGCAAAATGTCTTGCTGACTGAAA
ATGCAGAAGTTAAACTAGTGGACTTTGGAGTCAGTGCTCAGCTTGATCGAACAGTGGGCAGGAGGAATAC
TTTCATTGGAACCTCCTACTGGATGGCACCAGAAGTTATTGCCTGTGATGAAAACCCAGATGCCACATAT
GATTTCAAGAGTGACTTGTGGTCTTTGGGTATCACCGCCATTGAAATGGCAGAAGGTGCTCCCCCTCTCT
GTGACATGCACCCCATGAGAGCTCTCTCCTCATCCCCGGAACCCAGCGCCTCGGCTGAAGTCTAAGAA
GTGGTCAAAAAAATCCAGTCATTTATTGAGAGCTGCTTGGTAAAGAATCACAGCCAGCGACCAGCAACA
GAACAATTGATGAAGCATCCATTTATACGAGACCAACCTAATGAGCGACAGGTCCGCATCAACTCAAGG
ACCATATTGATAGAACAAGAAGAAGCGAGGAGAAAAAGATGAGACAGAGTATGAGTACAGTGGAAGTGA
GGAAGAAGAGGAGGAGAATGACTCAGGAGAGCCAGCTCCATCCTGAATCTGCCAGGGGAGTCGACGCTG
CGGAGGGACTTTCTGAGGCTGCAGCTGGCCAACAAGGAGCGTTCTGAGGCCCTACGGAGGCAGCAGCTGG
AGCAGCAGCAGCGGGAGAATGAGGAGCACAAGCGGCAGCTGCTGGCCGAGCGTCAGAAGCGCATCGAGGA
GCAGAAAGAGCAGAGGCGCGGCTGGAGGAGCAACAAGGCGAGAGAAGGAGCTGCGGAAGCAGCAGGAG
AGGGAGCAGCGCCGCACTATGAGGAGCAGATGCGCCGGGAGGAGGAGGAGGCGTGGGAGCATGAAC
AGGAATAAAGCGCAAACAATTGGAAGAACAGAGACAAGCAGAAAGACTGCAGAGGCAGCTAAAGCAAGA
AAGAGACTACTTAGTTTCCCTTCAGCATCAGCGCAGGAGCAGAGGCCTGTGGAGAAGAAGCCACTGTAC



CATTACAAAGAAGGAATGAGTCCTAGTGAGAAGCCAGCATGGGCCAAGGAGATCCACATCTGGTAGCTG
TAAATCCAGGGACCTGCCTTGACCGCCTCCCAGTCAGTGCACGAGCAGCCACAAAGGGCCTCTCTGG
GTTTCAGGAGGCTCTGAACGTGACCTCCCACCGGTGGAGATGCCACGCCAGAATCAGATCCCACCTCG
GAAATCCTCCTCTCCCACTCGCATTGAAAAGTTTGACCGAAGCTCTTGGTTACGACAGGAAGAAGACA
TTCCACCAAAGGTGCCTCAAAGAACAACCTCTATATCCCAGCATTAGCCAGAAAAGAAATTCCTGGGAA
TGGTAGTGCTCTGGGACCCAGACTAGGATCTCAACCCATCAGAGCAAGCAACCCTGATCTCCGGAGAAT
GAGCCCATCTTGGAGAGCCCTTGACAGAGACCAGCAGTGGCAGTTCCTCCAGCTCCAGCACCCCTAGCT
CCCAGCCAGCTCCCAAGGAGGCTCCCAGCCTGGATCACAAAGCAGGATCCAGTGAACGCACCAGAGTTCCG
AGCCAACAGTAAGTCAGAAGGATCACCTGTGCTCCCCATGAGCCTGCCAAGGTGAAACAGAAAGATCC
AGGGACATTACCCGGCCAGTCGACCAGCTAGCTACAAAAAGCTATAGATGAGGATCTGACGGCATTAG
CCAAAGAATAAGAGAATCCGGATTGAAGAAACAACCGCCCAATGAAGAAGGTGACTGATTACTCCTC
CTCCAGTGAGGAGTCAGAAAGTAGCGAGGAAGAGGAGGAAGATGGAGAGAGCGAGACCCATGATGGGACA
GTGGCTGCAGCGACATACCCAGACTGATACCAACAGGAGCTCCAGGCAGCAACGAGCAGTACAATGTGG
GAATGGTGGGACGCATGGGCTGGAGACCTCTCATGCGGACAGTTTCAGCGGCAGTATTTCAAGAGAAGG
AACCTTGATGATTAGAGAGAGCTCTGGAGAGAAGAAGCGATCTGGCCACAGTGACAGCAATGGCTTTGCT
GGCCACATCAACCTCCCTGACCTGGTGCAGCAGAGCCATTCTCCAGCTGGAACCCCGACTGAGGGACTGG
GGCGCTCTCAACCCATTCCCAGGAGATGGACTCTGGGACTGAATATGGCATGGGGAGCAGCACCAAAGC
CTCCTTACCCCTTTGTGGACCCAGAGTATACCAGACGCTCTCCCACTGATGAAGATGAAGAGGATGAG
GAATCATCAGCCCGAGCTCTGTTACTAGCGAACTTCTTAGGCAAGAACAGGCCAAACTCAATGAAGCAA
GAAAGATTTCCGTGGTAAATGTAACCCAAACCAACTTCGGCCTCATAGCGACACACCAGAAATCAGAAA
ATACAAGAAACGATTCAACTCAGAAATACTTTGTGCAGCTCTGTGGGTGTAACCTTCTGGTGGGGACT
GAAAATGGCCTGATGCTTTTGGACCGAAGTGGCAAGGCAAAGTCTATAATCTGATCAACCGGAGGCGAT
TTCAGCAGATGGATGTGCTAGAGGGACTGAATGTCCTTGTGACAATTTTCAGGAAAGAAGAATAAGCTACG
AGTTTACTATCTTTCATGGTTAAGAAAACAGAACTACATAATGACCCAGAAGTAGAAAAGAAAACAGGC
TGGATCACTGTTGGGGACTTGAAGGCTGTATACATTATAAAGTTGTTAAATATGAAAGGATCAAATTTT
TGGTGATTGCCTTAAAGAATGCTGTGGAATATATGCTTGGGCTCCTAAACCGTATCATAAATTCATGGC
ATTTAAGTCTTTTGCAGATCTCCAGCACAAGCCTCTGCTAGTTGATCTCACGGTAGAAGAAGGTCAAAGA
TTAAAGGTTATTTTTGGTTCACACACTGGTTCCATGTAATTGATGTTGATTTCAGGAAACTCTTATGATA
TCTACATACCATCTCATATTCAGGGCAATCACTCCTCATGCTATTGTCATCTGCCTAAAACAGATGG
AATGGAATGCTTGTGCTATGAGGATGAGGGGTGTATGTAACACCTATGGCCGGATAACTAAGGAT
GTGGTGTCCAATGGGGAGAAATGCCACGTCTGTGGCCTACATTCATTCCAATCAGATAATGGGCTGGG
GCGAGAAAGCTATTGAGATCCGGTCAGTGGAAACAGGACATTTGGATGGAGTATTTATGCATAAGCGAGC
TCAAAGGTTAAAGTTTCTATGTAAAGAAATGATAAGGTATTTTTGCATCCGTGCGATCTGGAGGAAGT
AGCCAAGTGTTTTTCATGACCCTCAACAGAAATTCATGATGAAGTGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG228663 representing NM_001161565
 Red=Cloning site Green=Tags(s)

MASDSPARSLDEIDL SALRDPAGIFELVELVGNNGTYGQVYKGRHVKTGQLAAIKVMDVTGDEEEEIKQEI
 NMLKKYSHHRNIATYYGAFIKKNPPGMDDQLWL VMEFCGAGSVTDLIKNTKGNTLKEEWIAYICREILRG
 LSHLHQHKVIHRDIKQNVLL TENAEVKLVDFGVSAQLDRTVGRNRTFIGTPYWMAPEVIACDENPDATY
 DFKSDLWSLGITAIEMAEGAPPLCDMHPMRALFLIPRNPAPRLKSKKWSKKFQSFIESCLVKNHSQRPAT
 EQLMKHPFIRDQPNERQVRIQLKDHIDRTKKRGEKDETEYEYSGSEEEEEENDSGEPSSILNLPGESTL
 RRDFLRQLANKERSEALRRQLEEQQRENEEHKRQLLAERQKRIEEEQKEQRRRLEEQRREKELRKQQE
 REQRRHYEEQMRREEERRRAEHEQEYKRKQLEEQRQAERLQRQLKQERDYL VSLQHQRQEQRPVKPKPLY
 HYKEGMSPEKPAWAKEIPHLVAVKSQGPAL TASQSVHEQPTKGLSGFQEALNVTSHRVEMPRQNSDPTS
 ENPPLPTRIEKFRSSWLRQEEDIPPKVPQRTTISIPALARKNSPGNGSALGPRLGSQPIRASNPDLRRT
 EPILSPLQRTSSGSSSSSTPSSQPSSQGSQPGSQAGSSERTRVRANSKSEGPSVLPHEPAKVKPEES
 RDITRPSRPASYKKAIDEDLTALAKELRELRIEETNRPMKKVTDYSSSSESESEEEEEEDGESETHDGT
 VAVSDIPRLIPTGAPGSNEQYNVGMVGTGLETSHADSFSGSISREGTLMIRETSGEKKRSGHSDSNGFA
 GHINLPDLVQQSHSPAGTPTEGLGRVSTHSQEMDSGTEYMGSSSTKASF TPFVDP RVYQT SPTDEDEEDE
 ESSAAALFTSELLRQEAKLNEARKISVVNVNPTNIRPHSDTPEIRKYKRFNSEILCAALWGVNLLVGT
 ENGLMLLDRSQGKVYNLINRRRFQOMDVLEGLNVLVTISGKKNKLRVYYL SWLRNRILHNDPEVEKQKG
 WITVGDLEGCIHYKVVKYERIKFLVIALKNAVEIYAWAPKPYHKFMAFKSFADLQHKPLL VDLTVEEQQR
 LKVI FGSHTGFHVIDVDSGNSYDIYIPSHIQGNITPHAI VILPKTDGMEMLVCYEDEGVVNTYGRITKD
 VVLQW GEMPTSVAYIHSNQIMGWGEKAI EIRSVETGHL DGVFMHKRAQLKFLCERNDKVFFASVRS GGS
 SQVFFMTLNRNSMMNW

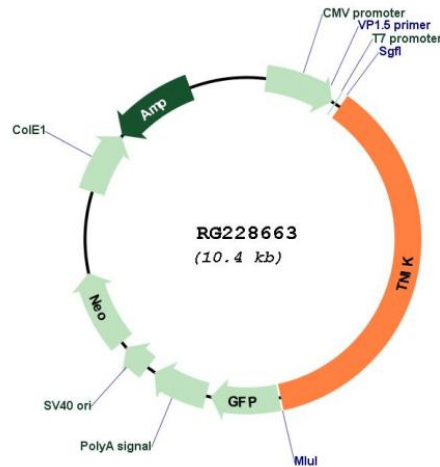
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001161565

ORF Size: 3828 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_001161565.2](#)

RefSeq Size: 5564 bp

RefSeq ORF: 3831 bp

Locus ID: 23043

UniProt ID: [Q9UKE5](#)

Cytogenetics: 3q26.2-q26.31

Protein Families: Druggable Genome, Protein Kinase

Gene Summary: Wnt signaling plays important roles in carcinogenesis and embryonic development. The protein encoded by this gene is a serine/threonine kinase that functions as an activator of the Wnt signaling pathway. Mutations in this gene are associated with an autosomal recessive form of cognitive disability. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2017]