

Product datasheet for **MG210343**

Ticam1 (NM_174989) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ticam1 (NM_174989) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ticam1
Synonyms:	AW046014; AW547018; TICAM-1; TRIF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG210343 representing NM_174989
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATAACCCAGGGCCTTCGCTCCGTGGTGCCTTTGGCATTCTAGGTGCCTTGGAAAGGGACAGGCTGA
 CCCACCTGAAACACAAGCTGGGGAGTCTGTGTTACGGCAGCCAGGAGTCAAAGCTTCTCCATGCCATGGT
 ACTCCTGGCTCTGGGCCAGGACACGGAGGCCAGGGTCTCTCTGGAGTCCCTGAAGATGAACACAGTAGCC
 CAGCTGGTAGCCACCAGTGGGCAGACATGGAGACCACAGAGGGCCCTGAGGAGCCTCCAGACTTGTCTT
 GGACGGTGGCTCGCTGTACCACCTGCTGGCTGAGGAGAACCTGTGTCCGGCCTCCACAAGGGACATGGC
 TTACCAGTGGCCCTTCGTGACTTTGCCTCCCAGGGTACCACCAGTGGCCAACTCCAGAATGAGGCC
 TGGGATCGGTGCAGTTCAGATATCAAGGGGGACCCAGTGGTTTCCAGCCACTCCATTCTCATCAGGGTT
 CCCTGCAGCCACCTTCAGCATCCCCTGCAGTGACCAGAAGCCAGCCTCGTCCCATTGACACACCAGACTG
 GAGTTGGGGACATACGTTACACTCCACCAACAGCACTGCCTCACTGGCCAGCCACCTAGAGATCAGCCAG
 TCAACCCACTCTTGCCCTTCTCTTTCACACCATGGAACCCATGGGCCAGCAAGCTATGTAACACACCCGC
 TGGACTCAGGAGCCTCAGCTTGTCCCTGAAGGCTGCCAAGAACCTGAGGAGATAAGCTGGCCTCCATC
 AGTGGAGACCAGTGTCTCCTTAGGGTTACCACACGAAATAGCGTTCCAGAGGTGTCTCCAGAGGAGGCT
 TCGCCCATCCTCCCTGACGCCCTGGCTGCTCCAGACACAAGTGTCCACTGTCCCATTGAATGCACAGAGT
 TGTCTACAAACTCCAGGTCTCCCTGACGTCCACCACAGAAAGTGTGGAAAGCAGTGGCCTATTACAAG
 TCAGAGGTCACCTCAGGTTCTGTAGGAGATGATTCTCTGCAGAACACCAGTCAATCCAGCCCTCCTGCC
 CAGCCACCATCCCTCAAAGCCTCCCCTAAGCTGCCTCCTTCCCCTCTGTCTCTGCTTCTCCCCGAGCA
 GCTACCCTGCTCCTCAAACCTCCACATCCCCTGTTTTGGACCACCTCAGAAACATCTGATCAGAAATTCTA
 TAACTTTGTGGTTATCCATGCCAGGGCTGATGAACAGGTGGCCCTACGTATTCCGGAGAAGCTGGAGACC
 CTCGGGGTACCTGACGGGGCCACCTTCTGTGAGGAATTTAGGTGCCCGGGCGTGGTGAAGTGCAGTGTCT
 TCCAAGATGCCATCGATCACTCGGGGTTACGATCCTGCTCCTGACTGCTAGCTTTGATTGCAGCCTGAG
 CCTGCATCAAAATCAACCATGCTCTCATGAACAGCCTTACACAGTCTGGGAGGCAGGACTGTGTGATCCCC
 CTCCTCCACTTGAGTGTCTCAGGCCAGCTCAGCCAGATAACAACAGACTGCTCCACAGCATTGTGT
 GGCTGGATGAACACTCCCAATCTTCGCCAGAAAGGTGGCAAACACCTTCAAGACACAGAAGCTCCAGGC
 ACAGCGGGTACGCTGGAAGAAAGCGCAGGAGGCCAGAACCCTCAAGGAGCAGAGCATAACAGCTGGAGGCA
 GAGCGGCAAAACGTGGCAGCCATATCTGCTGCCTACACAGCCTATGTCCATAGCTATAGGGCCTGGCAAG
 CAGAGATGAACAACTTGGGGTGGCTTTTGGGAAGAACTTGCTACTGGGGACTCCAACACCCAGCTGGCC
 CGGATGTCCACAGCCAATACCTTCTCATCCTCAGGGTGGTACTCCAGTTTTCCCCTATTTCCCACAGCCT
 CCATCCTTCCCTCAGCCTCCATGCTTCCCTCAGCCTCCATCCTTCCCTCAGCCTCCATCCTTCCCCTGC
 CTCCAGTCTTCCCCACAGTCCCAATCCTTTCCATCAGCCTCCTCCCCAGCCCCACAGACTCCAGGACC
 TCAGCCTCTATTATTCACCATGCCAGATGGTTCAGCTGGGTGTCAACAATCACATGTGGGGCCACACA
 GGGGCCAGTCACTGATGACAAGACTGAGTGTTCGGAGAACCCTGTATGGGCCCTCTGACTGATCAGG
 CGGAACCCCTTCTTGAGACTCCAGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210343 representing NM_174989
 Red=Cloning site Green=Tags(s)

MDNPGPSLRGAFGILGALERDRLTHLKHKLGLSCSGSQESKLLHAMVLLALGQDTEARVSLESKMMNTVA
 QLVAHQWADMETTEGPEEPPDLSWTVARLYHLLAEENLCPASTRDMAYQVALRDFASQGDHQLGQLQNEA
 WDRCSSDIKGDPSGFQPLHSHQGSQPPSASPAVTRSQPRPIDTPDWSWGHTLHSTNSTASLASHLEISQ
 SPTLAFLLSSHGTHGPKLCNTPLDTQEPQLVPEGCQEPEEISWPPSVETSVSLGLPHEISVPEVSPPEEA
 SPILPDALAAPDTSVHCPIECTELSTNSRPLTSTTESVKGQWPITSQRSFPQVPVGDSDLQNTTSSPPA
 QPPSLQASPKLPPSPLSSASSPSSYPAPTSTSPVLDHSETSDQKFYNFVVIHARADEQVALRIREKLET
 LGVPDGFATCEEFQVPGRGELHCLQDAIDHSGFTILLTASFDCSLHQLINHALMNSLTQSGRQDCVIP
 LLPLECSQAQLSPDTRLLHSIVWLDEHSPIFARKVANTFKTQKLQAQRVWRKKAQEARTLKEQSIQLEA
 ERQNVAASAAAYTAYVHSYRAWQAEMNKLGVAFGKNLSLGTPTPSWPGCPQPIPSHPQGGTVPFYPSPQP
 PSFPPQPPCFPQPPSFPQPPSFPPLPPVSSPQSQSFPSASSPAPQTPGPQPLIIHHAQMVQLGVNNHMWGH
 TGAQSSDDKTECSENPCMGPLTDQGEPLLETPE

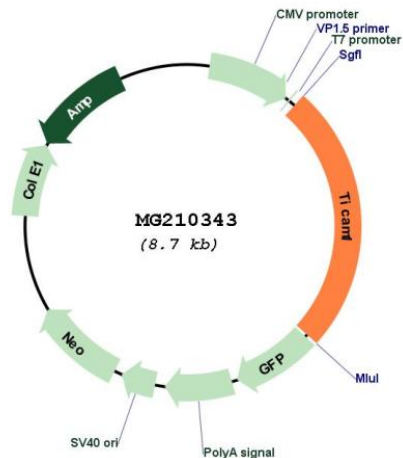
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_174989

ORF Size: 2196 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_174989.5](#)

RefSeq Size: 2852 bp

RefSeq ORF: 2199 bp

Locus ID: 106759

UniProt ID: [Q80UF7](#)

Cytogenetics: 17 D

Gene Summary: Involved in innate immunity against invading pathogens. Adapter used by TLR3, TLR4 (through TICAM2) and TLR5 to mediate NF-kappa-B and interferon-regulatory factor (IRF) activation, and to induce apoptosis (PubMed:12855817, PubMed:16002681, PubMed:21703541). Ligand binding to these receptors results in TRIF recruitment through its TIR domain (PubMed:12855817, PubMed:16002681, PubMed:21703541). Distinct protein-interaction motifs allow recruitment of the effector proteins TBK1, TRAF6 and RIPK1, which in turn, lead to the activation of transcription factors IRF3 and IRF7, NF-kappa-B and FADD respectively (PubMed:12855817, PubMed:16002681, PubMed:21703541). Phosphorylation by TBK1 on the pLxIS motif leads to recruitment and subsequent activation of the transcription factor IRF3 to induce expression of type I interferon and exert a potent immunity against invading pathogens (By similarity). Component of a multi-helicase-TICAM1 complex that acts as a cytoplasmic sensor of viral double-stranded RNA (dsRNA) and plays a role in the activation of a cascade of antiviral responses including the induction of proinflammatory cytokines (PubMed:21703541).[UniProtKB/Swiss-Prot Function]