

Product datasheet for **MR210343**

Ticam1 (NM_174989) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Ticam1 (NM_174989) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Ticam1 |
| Synonyms: | AW046014; AW547018; TICAM-1; TRIF |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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ORF Nucleotide Sequence:

>MR210343 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATAACCCAGGGCCTTCGCTCCGTGGTGCCTTTGGCATTCTAGGTGCCTTGGAAAGGGACAGGCTGA
 CCCACCTGAAACACAAGCTGGGGAGTCTGTGTTACGGCAGCCAGGAGTCAAAGCTTCTCCATGCCATGGT
 ACTCCTGGCTCTGGGCCAGGACACGGAGGCCAGGGTCTCTCTGGAGTCCCTGAAGATGAACACAGTAGCC
 CAGCTGGTAGCCACCAGTGGGCAGACATGGAGACCACAGAGGGCCCTGAGGAGCCTCCAGACTTGTCT
 GGACGGTGGCTCGCTGTACCACCTGCTGGCTGAGGAGAACCTGTGTCCGGCCTCCACAAGGGACATGGC
 TTACCAGTGGCCCTTCGTGACTTTGCCTCCCAGGGTACCACAGCTGGGCCAACTCCAGAATGAGGCC
 TGGGATCGGTGCAGTTCAGATATCAAGGGGGACCCAGTGGTTTCCAGCCACTCCATTCTCATCAGGGTT
 CCCTGCAGCCACCTTCAGCATCCCCTGCAGTGACCAGAAGCCAGCCTCGTCCCATTGACACACCAGACTG
 GAGTTGGGGACATACGTTACACTCCACCAACAGCACTGCCTCACTGGCCAGCCACCTAGAGATCAGCCAG
 TCAACCCACTCTTGCCCTTCTCTTTCACACCATGGAACCCATGGGCCAGCAAGCTATGTAACACACCCGC
 TGGACTCAGGAGCCTCAGCTTGTCCCTGAAGGCTGCCAAGAACCTGAGGAGATAAGCTGGCCTCCATC
 AGTGGAGACCAGTGTCTCCTTAGGGTTACCACACGAAATTAGCGTTCCAGAGGTGTCTCCAGAGGAGGT
 TCGCCCATCCTCCCTGACGCCCTGGCTGCTCCAGACACAAGTGTCCACTGTCCCATTGAATGCACAGAGT
 TGTCTACAAACTCCAGGTCTCCCTGACGTCCACCACAGAAAGTGTGGAAAGCAGTGGCCTATTACAAG
 TCAGAGGTCACCTCAGGTTCTGTAGGAGATGATTCTCTGCAGAACACCAGTTCATCCAGCCCTCCTGCC
 CAGCCACCATCCCTCAAAGCCTCCCCTAAGCTGCCTCCTTCCCCTGTCTCTGCTTCTCCCTCCCGAGCA
 GACTACCCTGCTCCTCAAACCTCCACATCCCCTGTTTTGGACCACCTCAGAAACATCTGATCAGAAATTCTA
 TAACTTTGTGGTTATCCATGCCAGGGCTGATGAACAGGTGGCCCTACGTATTCGGGAGAAGCTGGAGACC
 CTCGGGGTACCTGACGGGGCCACCTTCTGTGAGGAATTTAGGTGCCCGGGCGTGGTGAGCTGCACTGTC
 TCCAAGATGCCATCGATCACTCGGGGTTACGATCCTGCTCCTGACTGCTAGCTTTGATTGCAGCCTGAG
 CCTGCATCAAAATCAACCATGCTCTCATGAACAGCCTTACACAGTCTGGGAGGCAGGACTGTGTGATCCCC
 CTCCTCCACTTGAGTGTCTCAGGCCAGCTCAGCCAGATAACAACAGACTGCTCCACAGCATTGTGT
 GGCTGGATGAACACTCCCAATCTTCGCCAGAAAGGTGGCAAACACCTTCAAGACACAGAAGCTCCAGGC
 ACAGCGGGTACGCTGGAAGAAAGCGCAGGAGGCCAGAACCCTCAAGGAGCAGAGCATAACAGCTGGAGGCA
 GAGCGGCAAAACGTGGCAGCCATATCTGCTGCCTACACAGCCTATGTCCATAGCTATAGGCCTGGCAAG
 CAGAGATGAACAAACTTGGGGTGGCTTTTGGGAAGAACTTGTCACTGGGGACTCCAACACCCAGCTGGCC
 CGGATGTCCACAGCCAATACCTTCTCATCCTCAGGGTGGTACTCCAGTTTTCCCCTATTCACACAGCCT
 CCATCCTTCCCTCAGCCTCCATGCTTCCCTCAGCCTCCATCCTTCCCTCAGCCTCCATCCTTCCCCTGC
 CTCAGTCTCTTCCCACAGTCCCAATCCTTCCATCAGCCTCCTCCCAGCCCCACAGACTCCAGGACC
 TCAGCCTCTATTATCCACATGCCAGATGGTTCAGCTGGGTGTCAACAATCACATGTGGGGCCACACA
 GGGGCCAGTCACTGATGACAAGACTGAGTGTTCGGAGAACCCTGTATGGGCCCTCTGACTGATCAGG
 CGGAACCCCTTCTTGAGACTCCAGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210343 protein sequence
 Red=Cloning site Green=Tags(s)

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MDNPGPSLRGAFGILGALERDRLTHLKHKLGLSCSGSQESKLLHAMVLLALGQDTEARVSLESKLMNTVA
QLVAHQWADMETTEGPEEPPDLSWTVARLYHLLAEENLCPASTRDMAYQVALRDFASQGDHQLGQLQNEA
WDRCSSDIKGDPSGFQPLHSHQGSQPPSASPAVTRSQPRPIDTPDWSWGHTLHSTNSTASLASHLEISQ
SPTLAFLLSSHGTHGPKLCNTPLDTQEPQLVPEGCQEPEEISWPPSVETSVSLGLPHEISVPEVSPPEEA
SPILPDALAAPDTSVHCPIECTELSTNSRPLSTTTESVKGQWPITSQRSFPQVPVGDSDLQNTTSSPPA
QPPSLQASPPLPSSASSPSSYPAPTSTSPVLDHSETSDQKFYFVVIHARAEQVALRIREKLET
LGVPDGFCEEFQVPRGELHCLQDAIDHSGFTILLTASFDCSLHQLINHALMNSLTQSGRQDCVIP
LLPLECSQAQLSPDTRLLHSIVWLDEHSPIFARKVANTFKTQKLQAQRVWKAQEARTLKEQSIQLEA
ERQNVAASAAAYAVVHSYRAWQAEMNKLGVAFGKNLSLGTPTPSWPGCPQPIPSHPQGGTVPFYPSPQP
PSFPQPPCFPQPPSFPQPPSFPPLPVSSPQSFPSASSAPQTPGPQPLIIHHAQMVLGVNNHMWGHG
GAQSSDDKTECSENPCMGPLTDQGEPLLETPE
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_174989

ORF Size: 2199 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

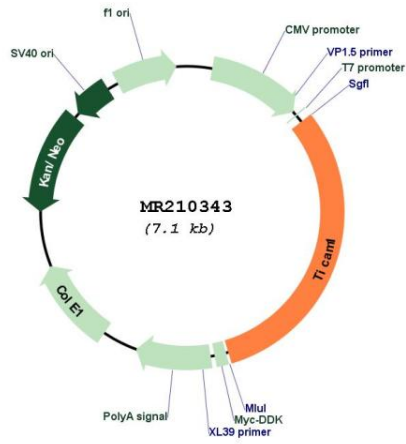
UniProt ID: [Q80UF7](#)

Cytogenetics: 17 D

MW: 79.2 kDa

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]

Product images:



Circular map for MR210343