OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR210582

Tnfaip3 (NM_009397) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tnfaip3 (NM_009397) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tnfaip3
Synonyms:	A20; Tnfip3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR210582 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGAACAACTTCTTCCTCAGGCTTTGTATTTGAGCAATATGCGGAAAGCTGTGAAGATACGAGAGA
GAACCCCAGAAGACATTTTCAAACCTACCAATGGGATCATCTATCACTTTAAAACCATGCACCGATACAC
GCTGGAGATGTTCAGAACATGCCAGTTTTGCCCACAGTTCCGAGAGATCATCCACAAAGCACTTATTGAC
AGAAGTGTCCAGGCTTCCCTGGAAAGCCAGAAGAAGCTCAACTGGTGTCGTGAAGTCAGGAAGCTCGTGG
CTCTGAAAACCAATGGTGATGGAAACTGCCTCATGCATGCAGCTTGTCAGTACATGTGGGGTGTTCAGGA
TACTGACCTGGTCCTGAGGAAGGCCCTCTGCAGCACCCTTAAGGAGACAGACACTCGGAACTTTAAATTC
CGCTGGCAGCTGGAATCTCTGAAATCTCAGGAATTTGTGGAAACAGGACTTTGCTACGACACTCGGAACT
GGAATGACGAATGGGACAACTTGGTCAAAATGGCATCAGCAGACACACCTGCAGCCCGAAGTGGACTTCA
GTACAATTCCCTGGAAGAAATCCACATATTTGTCCTCAGCAACATCCTCAGAAGACCCATCATTGTCATT
TCAGACAAAATGCTAAGAAGTTTGGAATCTGGTTCCAATTTTGCTCCTTTGAAAGTGGGTGGGATTTATC
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TGTACCCCTGGTGACCCTGAAGGACAGTGGACCTGAACTTCGCGCTGTTCCACTTGTTAACAGAGACCGG
GGTAGGTTTGAAGACTTAAAAGTTCACTTCTTGACAGATCCTGAGAATGAGATGAAGGAAAAGCTTCTAA
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TGCAAAATTGGATGAAGCTAACTTACCCAAAGAAATAAATTTGGTAGACGATTACTTTGAGCTTGTTCAG
CACGAATACAAGAAATGGCAGGAGAACAGCGATCAGGCCAGGAGAGCGGCACATGCGCAGAACCCCTTGG
AGCCTTCCACACCCCAGCTATCACTCATGGATATAAAATGTGAGACACCCAACTGTCCTTTCTTCATGTC
CGTGAACACTCAGCCTTTATTCCACGAATGCTCAGAGAGGCGCCAAAAGAATCAGAGCAAGCTCCCAAAG
CTGAACTCGAAGCTAGGCCCTGAAGGACTCCCAGGCGTGGGACTTGGCTCCTCAAACTGGAGCCCCGAGG
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GGAAGAACAGCTGAGATCAAGCCAGCATAGAGACATGCCTCGAACTACACAGGTAGCCTCAAGGCTGAAA
TGTGCCCGGGCCTCCTGCAAGAACATTCTGGCCTGTCGCAGTGAGGAACTCTGTATGGAGTGCCAGCACC
TAAGCCAACGAGTAGGTTCTGTGGCCCACCGGGGTGAGCCCACGCCTGAAGAGCCCCCTAAACAGCGCTG
CCGGGCCCCTGCTTGTGATCACTTTGGCAATGCCAAGTGTAATGGTTACTGCAATGAGTGCTACCAGTTC
AAGCAGATGTATGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210582 protein sequence
Red=Cloning site Green=Tags(s)

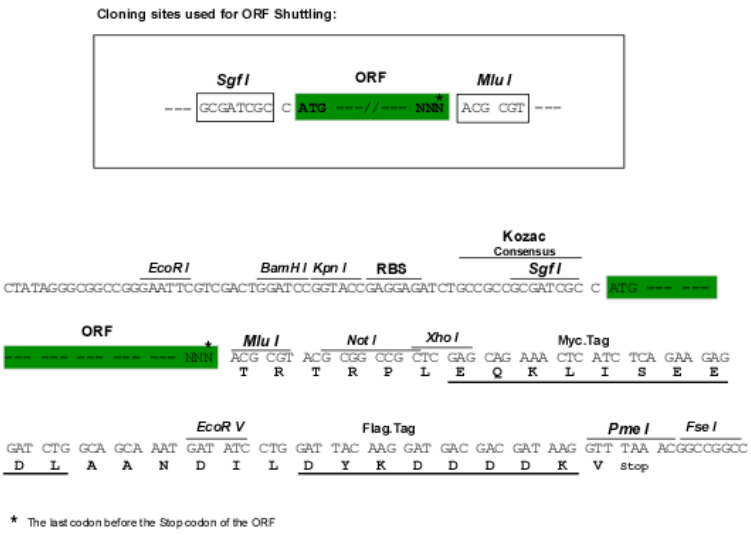
MAEQLLPQALYLSNMRKAVKIRERTPEDIFKPTNGIIYHFKTMHRYTLEMFRTCQFCPQFREIIHKALID
RSVQASLESQKKLNWCREVRKLVALKTNGDGNCLMHAACQYMWGVQDTDLVLRKALCSTLKETDTRNFKF
RWQLESLKSQEFVETGLCYDTRNWNDEWDNLVKMASADTPAARSGLQYNSLEEIHIFVLSNILRRPIIVI
SDKMLRSLESGSNFAPLKVGGIYLPLHWPAQECYRYPIVLGYDSQHFVPLVTLKDSGPELRAVPLVNRDR
GRFEDLKVHFLTDPENEMKEKLLKEYLIVMEIPVQGWDHGTTHLINAAKLDEANLPKEINLVDDYFELVQ
HEYKKWQENSDQARRAAHAQNPLEPSTPQLSLMDIKCETPNCPFFMSVNTQPLFHECSERRQKNQSKLPK
LNSKLGPEGLPGVGLGSSNWSPEETAGGPHSAPPTAPSLFLFSETTAMKCRSPGCPFTLNVQHNGFCERC
HARQINASHTADPGKCQACLQDVTRTFNGICSTCFKRTTAEPSSSLTSSIPASCHQRSKSDPSQLIQSLT
PHSCHRTGNVSPSGCLSQAARTPGDRAGTSKCRKAGCMYFGTPENKGFCTLCFIEYRENKQSVTASEKAG
SPAPRFQNNVPCLGRECGTLGSTMFEGYCQKCFIEAQNQRFHEARRTEEQLRSSQHRDMPRTTQVASRLK
CARASCKNILACRSEELCMECQHLSQRVGSVAHRGEPTPEEPPKQRCRAPACDHFGNAKCNGYCNECYQF
KQMYG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1867_c06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_009397

ORF Size: 2325 bp

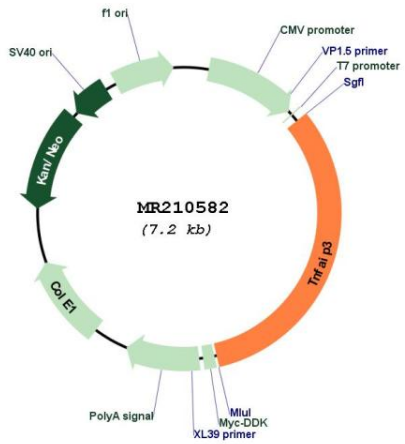
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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_009397.1, NM_009397.2, NM_009397.3, NP_033423.3
RefSeq Size:	4437 bp
RefSeq ORF:	2328 bp
Locus ID:	21929
UniProt ID:	Q60769
Cytogenetics:	10 8.08 cM
MW:	87.7 kDa

Gene Summary: Ubiquitin-editing enzyme that contains both ubiquitin ligase and deubiquitinase activities. Involved in immune and inflammatory responses signaled by cytokines, such as TNF-alpha and IL-1 beta, or pathogens via Toll-like receptors (TLRs) through terminating NF-kappa-B activity. Essential component of a ubiquitin-editing protein complex, comprising also RNF11, ITCH and TAX1BP1, that ensures the transient nature of inflammatory signaling pathways. In cooperation with TAX1BP1 promotes disassembly of E2-E3 ubiquitin protein ligase complexes in IL-1R and TNFR-1 pathways; affected are at least E3 ligases TRAF6, TRAF2 and BIRC2, and E2 ubiquitin-conjugating enzymes UBE2N and UBE2D3. In cooperation with TAX1BP1 promotes ubiquitination of UBE2N and proteasomal degradation of UBE2N and UBE2D3. Upon TNF stimulation, deubiquitinates 'Lys-63'-polyubiquitin chains on RIPK1 and catalyzes the formation of 'Lys-48'-polyubiquitin chains. This leads to RIPK1 proteasomal degradation and consequently termination of the TNF- or LPS-mediated activation of NF-kappa-B. Deubiquitinates TRAF6 probably acting on 'Lys-63'-linked polyubiquitin. Upon T-cell receptor (TCR)-mediated T-cell activation, deubiquitinates 'Lys-63'-polyubiquitin chains on MALT1 thereby mediating disassociation of the CBM (CARD11:BCL10:MALT1) and IKK complexes and preventing sustained IKK activation. Deubiquitinates NEMO/IKBKG; the function is facilitated by TNIP1 and leads to inhibition of NF-kappa-B activation. Upon stimulation by bacterial peptidoglycans, probably deubiquitinates RIPK2. Can also inhibit I-kappa-B-kinase (IKK) through a non-catalytic mechanism which involves polyubiquitin; polyubiquitin promotes association with IKBKG and prevents IKK MAP3K7-mediated phosphorylation. Targets TRAF2 for lysosomal degradation. In vitro able to deubiquitinate 'Lys-11'-, 'Lys-48'- and 'Lys-63' polyubiquitin chains. Inhibitor of programmed cell death. Has a role in the function of the lymphoid system. Required for LPS-induced production of proinflammatory cytokines and IFN beta in LPS-tolerized macrophages.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210582