

Product datasheet for **SC125235**

TNF alpha (TNF) (NM_000594) Human Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | TNF alpha (TNF) (NM_000594) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | TNF alpha |
| Synonyms: | DIF; TNF-alpha; TNFA; TNFSF2; TNLG1F |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| Fully Sequenced ORF: | >OriGene ORF within SC125235 sequence for NM_000594 edited (data generated by NextGen Sequencing) |

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ATGAGCACTGAAAGCATGATCCGGGACGTGGAGCTGGCCGAGGAGCGCTCCCAAGAAG
ACAGGGGGGCCCCAGGGCTCCAGGCGGTGCTTGTTCCTCAGCCTTCTCCTTCCTGATC
GTGGCAGGCGCCACCACGCTTCTGCCTGCTGCACTTTGGAGTGATCGGCCCCAGAGG
GAAGAGTTCGCCAGGACCTCTCTAATCAGCCCTCTGGCCAGGCAGTCAGATCATCT
TCTCGAACCCGAGTGACAAGCCTGTAGCCCATGTTGTAGCAAACCCCTCAAGCTGAGGGG
CAGCTCCAGTGGTGAACCGCCGGCCAATGCCCTCCTGGCCAATGGCGTGGAGCTGAGA
GATAACCAGCTGGTGGTCCATCAGAGGGCCTGTACCTCATCTACTCCAGGTCTCTTC
AAGGGCCAAGGCTGCCCTCCACCCATGTGCTCCTCACCCACCCATCAGCCGCATCGCC
GTCTCCTACCAGACCAAGGTCAACCTCCTCTGCCATCAAGAGCCCCTGCCAGAGGGAG
ACCCAGAGGGGGCTGAGGCAAGCCCTGGTATGAGCCATCTATCTGGGAGGGGTCTTC
CAGCTGGAGAAGGGTGACCGACTCAGCGCTGAGATCAATCGGCCGACTATCTCGACTTT
GCCGAGTCTGGCAGGTCTACTTTGGGATCATTGCCCTGTGA
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Clone variation with respect to NM_000594.2



[View online »](#)

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000594 unedited
 GACTCACTATAGGGCGGCCGGAATTCGAAAGGACACCATGAGCACTGAAAGCATGATCC
 GGGACGTGGAGCTGGCCGAGGAGCGCTCCCAAGAAGACAGGGGGCCCCAGGGCTCCA
 GGGCGTGTGTTGTTCTCAGCCTCTTCTCCTTCTGATCGTGGCAGGCGCCACCACGCTCT
 TCTGCCTGCTGCACTTTGGAGTGATCGGCCCCAGAGGGAAGAGTTCCCCAGGGACCTCT
 CTCTAATCAGCCCTCTGGCCCAGGCAGTCAGATCATCTTCTCGAACCCCGAGTGACAAGC
 CTGTAGCCCATGTTGTAGCAAACCCTCAAGCTGAGGGGCAGCTCCAGTGGCTGAACCGCC
 GGGCCAATGCCCTCTGGCCAATGGCGTGGAGCTGAGAGATAACCAGCTGGTGGTGCCAT
 CAGAGGGCCTGTACCTCATCTACTCCCAGGTCCTTCAAGGGCCAAGGTGCCCTCCA
 CCCATGTGCTCCTCACCCACACCATCAGCCGCATCGCCGTCTCCTACCAGACCAAGGTCA
 ACCTCCTCTCTGCCATCAAGAGCCCTGCCAGAGGGAGACCCAGAGGGGCTGAGGCCAG
 CCCTGTATGAGCCATCTTCTTGAAGGGTCTTCGCTTGAGAGGTGACCGATTAACCTGAA
 TCAATGGCCGAATATCTGACTTCCAGCTTGGCAGGTTAATTGGATCATTGCTGGAAGCC
 CCCTTATTGGCCGGGCATATTTT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000594 unedited
 GCGAGCACTGGGNAGTGGGTACAGGGCATGCCACCCGGGTATCTGTTGCAAGAAAACA
 GCTATGACCGCGCCGAATCTAGAGTCGAGCCTCACAGGGCAATGATCCCAAAGTAGAC
 CTGCCAGACTCGCAAAGTCGAGATAGTCGGGCCGATTGATCTCAGCGCTGAGTCGGTC
 ACCCTTCTCCAGCTGGAAGACCCCTCCCAGATAGATGGGCTCATACCAGGGCTTGGCCTC
 AGCCCCCTCTGGGGTCTCCCTCTGGCAGGGCTCTTGATGGCAGAGAGGAGTTGACCTT
 GGTCTGGTAGGAGACGGCGATGCGGCTGATGGTGTGGGTGAGGAGACATGGGTGGAGGG
 GCAGCCTTGGCCCTTGAAGAGGACCTGGGAGTAGATGAGGTACAGGCCCTCTGATGGCAC
 CACCAGCTGGTTATCTCTCAGCTCCACGCCATTGGCCAGGAGGGCATTGGCCCGCGGTT
 CAGCCACTGGAGCTGCCCTCAGCTTGAGGGTTTGTACAACATGGGCTACAGGCTTGTC
 ACTCGNGTTCGAGAAGATGATCTGACTGCCTGGGCCAGAGGGCTGATTAGAGAGAGGTC
 CCTGGGAACTCTTCCCTCTGGGGCCGATCACTCCANAGTGCAGCAGGCAGAAGAGCGT
 GGGTGGCGCCTGCCACGATCAGGGAAGAGAAGAGGCTGAGGAAACAGCACCGCCTGGAGC
 CCTGGGGCCCCCTGTCTTCTTGGGGGAGCGCCTCTCGCCAGCTCCACGTCCCGGATCA
 TGCTTNCAGTGCTCATGGTGGTCTTTCGATTTTCGGGGCGCCCTATGNTGAGTCGTATTA
 CAAAATTTGACGGTTCACTAAACGAGCTTTGCTTATTTAGACCTCCACCGTACACGC

Restriction Sites:

Please inquire

ACCN:

NM_000594

Insert Size:

700 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](#)

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| 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: | <ol style="list-style-type: none">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_000594.2 , NP_000585.2 |
| RefSeq Size: | 1669 bp |
| RefSeq ORF: | 702 bp |
| Locus ID: | 7124 |
| UniProt ID: | P01375 |
| Cytogenetics: | 6p21.33 |
| Protein Families: | Druggable Genome, Secreted Protein, Transcription Factors, Transmembrane |
| Protein Pathways: | Adipocytokine signaling pathway, Allograft rejection, Alzheimer's disease, Amyotrophic lateral sclerosis (ALS), Apoptosis, Asthma, Cytokine-cytokine receptor interaction, Dilated cardiomyopathy, Fc epsilon RI signaling pathway, Graft-versus-host disease, Hematopoietic cell lineage, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway, Natural killer cell mediated cytotoxicity, NOD-like receptor signaling pathway, RIG-I-like receptor signaling pathway, Systemic lupus erythematosus, T cell receptor signaling pathway, TGF-beta signaling pathway, Toll-like receptor signaling pathway, Type I diabetes mellitus, Type II diabetes mellitus |
| Gene Summary: | This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, psoriasis, rheumatoid arthritis ankylosing spondylitis, tuberculosis, autosomal dominant polycystic kidney disease, and cancer. Mutations in this gene affect susceptibility to cerebral malaria, septic shock, and Alzheimer disease. Knockout studies in mice also suggested the neuroprotective function of this cytokine. [provided by RefSeq, Aug 2020] |