

Product datasheet for RC207596

TRAIL (TNFSF10) (NM_003810) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRAIL (TNFSF10) (NM_003810) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRAIL
Synonyms:	Apo-2L; APO2L; CD253; TL2; TNLG6A; TRAIL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207596 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTATGATGGAGGTCCAGGGGGACCCAGCCTGGGACAGACCTGCGTGCTGATCGTGATCTTCACAG
TGCTCCTGCAGTCTCTGTGTGGCTGTAACCTACGTGTACTTTACCAACGAGCTGAAGCAGATGCAGGA
CAAGTACTCCAAAAGTGGCATTGCTTGTTCCTAAAAGAAGATGACAGTTATTGGGACCCCAATGACGAA
GAGAGTATGAACAGCCCCTGCTGGCAAGTCAAGTGGCAACTCCGTCAGCTCGTTAGAAAGATGATTTTGA
GAACCTCTGAGGAAACATTTCTACAGTTCAAGAAAAGCAACAAAATATTTCTCCCTAGTGAGAGAAAAG
AGGTCCTCAGAGAGTAGCAGCTCACATAACTGGGACCAGAGGAAGAAGCAACACATTGTCTTCTCCAAAC
TCCAAGAATGAAAAGGCTCTGGGCCGAAAATAAACTCCTGGGAATCATCAAGGAGTGGGCATTCATTCC
TGAGCAACTTGCACTTGAGGAATGGTGAAGTGGTCAATCCATGAAAAAGGGTTTTACTACATCTATTTCCCA
AACATACTTTTCGATTTTCAGGAGGAAATAAAAGAAAACACAAAGAACGACAAACAAATGGTCCAATATATT
TACAAATACACAAGTTATCCTGACCCTATATTGTTGATGAAAAGTGTAGAAATAGTTGTTGGTCTAAAG
ATGCAGAATATGGACTCTATTCCATCTATCAAGGGGAATATTTGAGCTTAAGGAAAATGACAGAATTTT
TGTTTCTGTAACAAATGAGCACTTGATAGACATGGACCATGAAGCCAGTTTTTTTCGGGGCCTTTTTAGTT
GGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC207596 protein sequence
Red=Cloning site Green=Tags(s)

MAMMEVQGGPSLGQTCVLIVIFTVLLQSLCVAVTYYVFTNELKQMQDKYSKSGIACFLKEDDSYWDPNDE
 ESMNSPCWQVKWQLRQLVRKMILRTSEETISTVQEKQNI SPLVRERGPQRVAAHITGTRGRSNTLSSPN
 SKNEKALGRKINSWESSRSGHSFLSNLHLRNGELVIEHKGFFYYIYSQTYFRFQEEIKENTKNDKQMVQYI
 YKYTSYPDPILLMKSARNSCWSKDAEYGLYSIYQGGIFELKENDRIFVSVTNEHLIDMDHEASFFGAFLV
 G

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6336_h12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003810

ORF Size: 843 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_003810.2](#), [NP_003801.1](#)

RefSeq Size: 1953 bp

RefSeq ORF: 846 bp

Locus ID: 8743

UniProt ID: [P50591](#)

Cytogenetics: 3q26.31

Domains: TNF

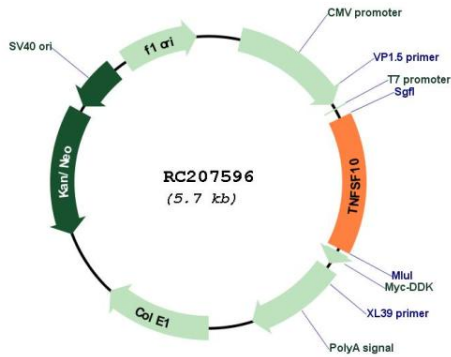
Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Apoptosis, Cytokine-cytokine receptor interaction, Natural killer cell mediated cytotoxicity

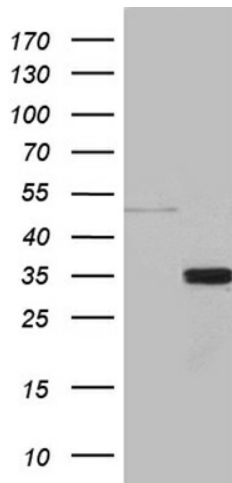
MW: 32.5 kDa

Gene Summary: The protein encoded by this gene is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. This protein preferentially induces apoptosis in transformed and tumor cells, but does not appear to kill normal cells although it is expressed at a significant level in most normal tissues. This protein binds to several members of TNF receptor superfamily including TNFRSF10A/TRAILR1, TNFRSF10B/TRAILR2, TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4, and possibly also to TNFRSF11B/OPG. The activity of this protein may be modulated by binding to the decoy receptors TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4, and TNFRSF11B/OPG that cannot induce apoptosis. The binding of this protein to its receptors has been shown to trigger the activation of MAPK8/JNK, caspase 8, and caspase 3. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2010]

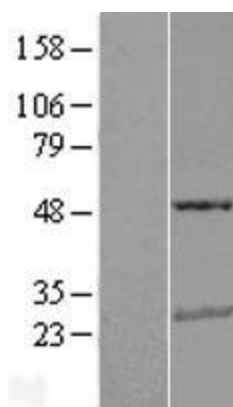
Product images:



Circular map for RC207596



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TNFSF10 (Cat# RC207596, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TNFSF10 (Cat# [TA811775]). Positive lysates [LY418411] (100ug) and [LC418411] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418411]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207596 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).