

## Product datasheet for RC219997

### TNFRSF18 (NM\_004195) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	TNFRSF18
Synonyms:	AITR; CD357; ENERGEN; GITR; GITR-D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC219997 representing NM_004195 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGGCACAGCACGGGGCGATGGGCGCTTTGGGGCCCTGTGCGGCCTGGCGCTGCTGTGCGCGCTCAGCC  
 TGGGTACGCGCCCCACCGGGGTCCCGGTGCGGCCCTGGGCGCCTCTGCTTGGGACGGGAACGGACGC  
 GCGCTGCTGCGGGTTACACGACGCGCTGCTGCCGCGATTACCGGGCGAGGAGTGCTGTTCCGAGTGG  
 GACTGCATGTGTGTCCAGCCTGAATTCCTGCGGAGACCCTTGCTGCACGACCTGCCGGCACCACCTT  
 GTCCCCAGGCCAGGGGTACAGTCCCAGGGGAAATTCAGTTTTGGCTTCCAGTGTATCGACTGTGCCTC  
 GGGGACCTTCTCCGGGGGCCACGAAGGCCACTGCAAACCTTGGACAGACTGCACCCAGTTCCGGTTTCTC  
 ACTGTGTTCCCTGGGAACAAGACCCACAACGCTGTGTGCGTCCCAGGGTCCCCGCCGCGCAGAGCCGCTTG  
 GGTGGCTGACCGTCGTCCTCTGGCCGTGGCCGCTGCGTCCTCCTCTGACCTCGGCCAGCTTGGACT  
 GCACATCTGGCAGCTGAGGAGTCAGTGCATGTGGCCCCGAGAGACCCAGCTGCTGCTGGAGGTGCCGCCG  
 TCGACCGAAGACGCCAGAAGCTGCCAGTCCCCGAGGAAGAGCGGGGCGAGCGATCGGCAGAGGAGAAGG  
 GCGGCTGGGAGACCTGTGGGTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA


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**Protein Sequence:** >RC219997 representing NM\_004195  
 Red=Cloning site Green=Tags(s)

MAQHGMAGFRALCGLALLCALSLGQRPTGGPGCGPGRLLLGTGTDARCCRVHTTRCCRDYPGEECCSEW  
 DCMCVQPEFHCGDPCCTTCRHHPCPPGQGVQSQKFSFGFQCIDCASGTFSGGHEGHCKPWTDCQFQFGL  
 TVFPGNKTHNAVCPGSPPAEPLGWLTVVLLAVAACVLLLTSAQLGLHIWQLRSQCMWPRETQLLLEVPP  
 STEDARSCQFPPEERGERSAEEKGRLGDLWV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6268\\_d05.zip](https://cdn.origene.com/chromatograms/mk6268_d05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_004195

**ORF Size:** 723 bp

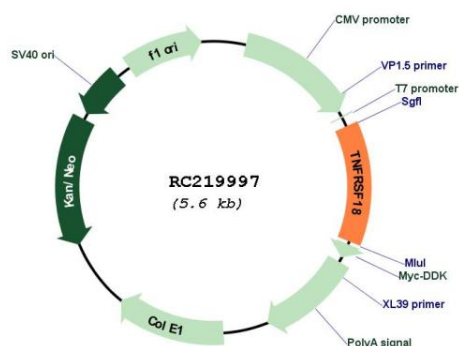
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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](#)

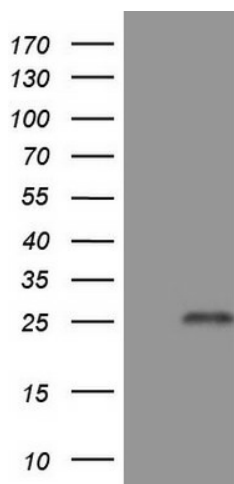
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<u><a href="#">NM_004195.3</a></u>
<b>RefSeq Size:</b>	1214 bp
<b>RefSeq ORF:</b>	726 bp
<b>Locus ID:</b>	8784
<b>UniProt ID:</b>	<u><a href="#">Q9Y5U5</a></u>
<b>Cytogenetics:</b>	1p36.33
<b>Protein Families:</b>	Druggable Genome, Secreted Protein, Transmembrane
<b>Protein Pathways:</b>	Cytokine-cytokine receptor interaction
<b>MW:</b>	26 kDa
<b>Gene Summary:</b>	This gene encodes a member of the TNF-receptor superfamily. The encoded receptor has been shown to have increased expression upon T-cell activation, and it is thought to play a key role in dominant immunological self-tolerance maintained by CD25(+)CD4(+) regulatory T cells. Knockout studies in mice also suggest the role of this receptor is in the regulation of CD3-driven T-cell activation and programmed cell death. Three alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Feb 2011]

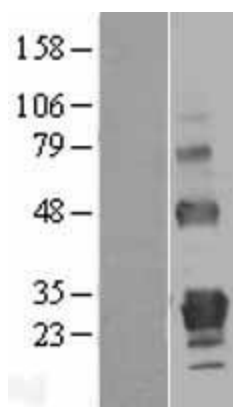
## Product images:



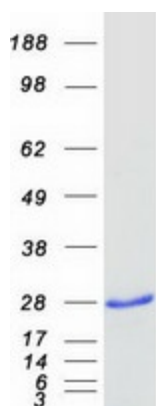
Circular map for RC219997



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TNFRSF18 (Cat# RC219997, 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-TNFRSF18 (Cat# [TA806606]). Positive lysates [LY418153] (100ug) and [LC418153] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418153]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219997 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TNFRSF18 protein (Cat# [TP319997]). The protein was produced from HEK293T cells transfected with TNFRSF18 cDNA clone (Cat# RC219997) using MegaTran 2.0 (Cat# [TT210002]).