

Product datasheet for **RC221007**

TWEAK (TNFSF12) (NM_003809) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TWEAK (TNFSF12) (NM_003809) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TWEAK
Synonyms:	APO3L; DR3LG; TNLG4A; TWEAK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221007 representing NM_003809 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGCCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCC

ATGGCCGCCCGTCGGAGCCAGAGCGGAGGGGGCGCCGGGGGAGCCGGGCACCGCCCTGCTGGTCCCGC
TCGCGCTGGGCCTGGGCCTGGCCTGGCCTGCCTCGGCCCTCTGCTGGCCGTGGTCAGTTTGGGAGCCG
GGCATCGCTGTCCGCCAGGAGCCTGCCAGGAGGAGCTGGTGGCAGAGGAGACCAGGACCCGTCGGAA
CTGAATCCCAGACAGAAGAAAGCCAGGATCCTGCGCCTTCTGAACCGACTAGTTCGGCCTCGCAGAA
GTGCACCTAAAGCCGGAAAACACGGGCTCGAAGAGCGATCGCAGCCATTATGAAGTTCATCCACGACC
TGGACAGGACGGAGCGCAGGCAGGTGTGGACGGGACAGTGAGTGGCTGGGAGGAAGCCAGAATCAACAGC
TCCAGCCCTCTGCGCTACAACCGCCAGATCGGGGAGTTTATAGTACCCGGGCTGGGCTCTACTACCTGT
ACTGTCAGGTGCACTTTGATGAGGGGAAGGCTGTCTACCTGAAGCTGGACTTGCTGGTGGATGGTGTGCT
GGCCCTGCGCTGCCTGGAGGAATTCTCAGCCACTGCGGCGAGTTCCTCGGGCCCCAGCTCCGCCTCTGC
CAGGTGTCTGGGCTGTTGGCCCTGCGGCCAGGGTCTCCTCCGCGATCCGCACCCCTCCCTGGGCCCATC
TCAAGGCTGCCCCCTTCTCACCTACTTCGGACTCTTCCAGGTTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC221007 representing NM_003809
 Red=Cloning site Green=Tags(s)

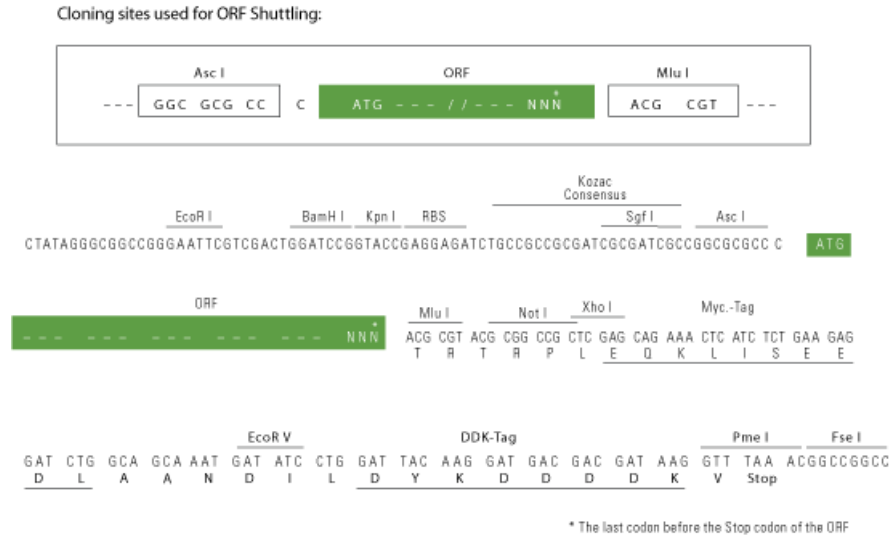
MAARRSQRRRGRGEPGTALLVPLALGLGLALACLGLLLAVVSLGSRASLSAQEPAQEELVAEEDQDPSE
 LNPQTEESQDPAPFLNRLVRRRSAPKGRKTRARRAIAAHYEVHPRPGQDGAQAGVDGTVSGWEEARINS
 SSPLRYNRQIGEFIVTRAGLYLYCQVHFDEGKAVYLLKDLLVDGVLALRCLEEFATAAASLGPQLRLC
 QVSGLLALRPGSSLRIRTLPPWAHLKAAPFLTYFGLFQVH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3505_b09.zip

Restriction Sites: AscI-MluI

Cloning Scheme:



ACCN: NM_003809

ORF Size: 747 bp

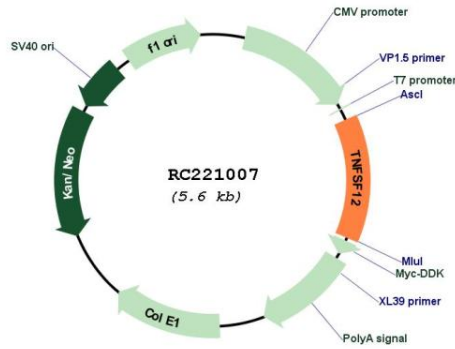
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA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

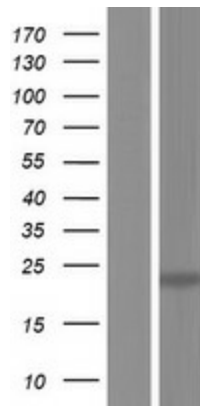
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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_003809.3
RefSeq Size:	1407 bp
RefSeq ORF:	750 bp
Locus ID:	8742
UniProt ID:	O43508
Cytogenetics:	17p13.1
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane
Protein Pathways:	Cytokine-cytokine receptor interaction
MW:	27.22 kDa
Gene Summary:	<p>The protein encoded by this gene is a cytokine that belongs to the tumor necrosis factor (TNF) ligand family. This protein is a ligand for the FN14/TWEAKR receptor. This cytokine has overlapping signaling functions with TNF, but displays a much wider tissue distribution. This cytokine, which exists in both membrane-bound and secreted forms, can induce apoptosis via multiple pathways of cell death in a cell type-specific manner. This cytokine is also found to promote proliferation and migration of endothelial cells, and thus acts as a regulator of angiogenesis. Alternative splicing results in multiple transcript variants. Some transcripts skip the last exon of this gene and continue into the second exon of the neighboring TNFSF13 gene; such read-through transcripts are contained in GeneID 407977, TNFSF12-TNFSF13. [provided by RefSeq, Oct 2010]</p>

Product images:



Circular map for RC221007



Western blot validation of overexpression lysate (Cat# [LY418410]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221007 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).