

Product datasheet for RG221007

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: TurboGFP
Symbol: TNFSF12

Synonyms: APO3L; DR3LG; TNLG4A; TWEAK

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG221007 representing NM_003809

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGGCGCCCC

TCAAGGCTGCCCCCTTCCTCACCTACTTCGGACTCTTCCAGGTTCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG221007 representing NM_003809

Red=Cloning site Green=Tags(s)

MAARRSQRRRGEPGTALLVPLALGLGLALACLGLLLAVVSLGSRASLSAQEPAQEELVAEEDQDPSE LNPQTEESQDPAPFLNRLVRPRRSAPKGRKTRARRAIAAHYEVHPRPGQDGAQAGVDGTVSGWEEARINS SSPLRYNRQIGEFIVTRAGLYYLYCQVHFDEGKAVYLKLDLLVDGVLALRCLEEFSATAASSLGPQLRLC QVSGLLALRPGSSLRIRTLPWAHLKAAPFLTYFGLFQVH

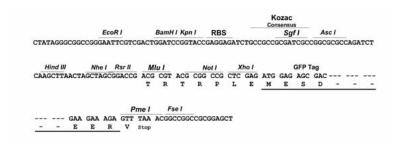
TRTRPLE - GFP Tag - V

Restriction Sites:

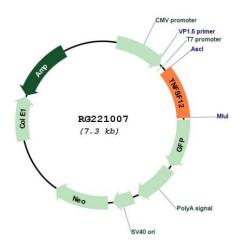
Ascl-Mlul

Cloning Scheme:





Plasmid Map:



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 customercom 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. <u>More info</u>

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:

Cytogenetics:

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: <u>NM 003809.3</u>

 RefSeq Size:
 1407 bp

 RefSeq ORF:
 750 bp

 Locus ID:
 8742

 UniProt ID:
 043508

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: Cytokine-cytokine receptor interaction

17p13.1





Gene Summary:

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]