

Product datasheet for **RC218141**

TGF alpha (TGFA) (NM_001099691) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: TGF alpha (TGFA) (NM_001099691) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: TGF alpha
Synonyms: TFGA
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC218141 representing NM_001099691
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTCCCCTCGGCTGGACAGCTCGCCCTGTTTCGCTCTGGGTATTGTGTTGGCTGCGTGCCAGGCCCTTGG
AGAACAGCACGTCCCGCTGAGTGACCCGCCCGTGGCTGCAGCAGTGGTGTCCATTTTAAATGACTGCC
AGATCCACACTCAGTTCTGCTCCATGGAACCTGCAGGTTTTTGGTGCAGGAGGACAAGCCAGCATGT
GTCTGCCATTCTGGGTACGTTGGTGCACGCTGTGAGCATGCGGACCTCCTGGCCGTGGTGGCTGCCAGCC
AGAAGAAGCAGGCCATCACCGCCTTGGTGGTGGTCTCCATCGTGGCCCTGGCTGCCTTATCATCATG
TGTGCTGATACACTGCTGCCAGGTCCGAAAACACTGTGAGTGGTCCCGGCCCTCATCTGCCGGCAGGAG
AAGCCAGCGCCCTCTGAAGGGAAGAACCCTTCTGCTGCCACTCAGAAACAGTGGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC218141 representing NM_001099691
Red=Cloning site Green=Tags(s)

MVPSAGQLALFALGIVLAACQALENSTSPLSDPPVAAA VVSHFNDCPDSHTQFCFHGTCRFLVQEDKPAC
VCHSGYVGARCEHADLLAVVAASQKKQAITALVVVIVALAVLIITCVLIHCCQVRKHCEWCRALICRHE
KPSALLKGRACCHSETVV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1462_b06.zip



[View online >](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001099691

ORF Size: 477 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:

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_001099691.3](#)

RefSeq Size: 4261 bp

RefSeq ORF: 480 bp

Locus ID: 7039

UniProt ID: [P01135](#)

Cytogenetics: 2p13.3

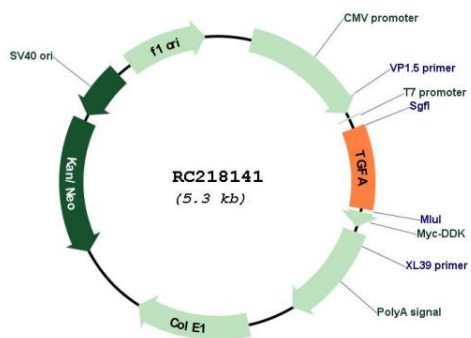
Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: ErbB signaling pathway, Glioma, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Prostate cancer, Renal cell carcinoma

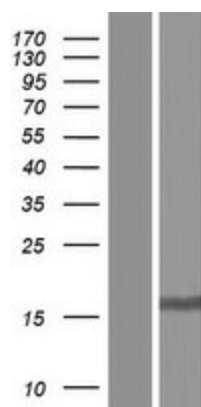
MW: 16.8 kDa

Gene Summary: This gene encodes a growth factor that is a ligand for the epidermal growth factor receptor, which activates a signaling pathway for cell proliferation, differentiation and development. This protein may act as either a transmembrane-bound ligand or a soluble ligand. This gene has been associated with many types of cancers, and it may also be involved in some cases of cleft lip/palate. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]

Product images:



Circular map for RC218141



Western blot validation of overexpression lysate (Cat# [LY420499]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218141 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).