

## Product datasheet for **RC225697**

### TGF beta Receptor I (TGFB1) (NM\_001130916) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TGF beta Receptor I (TGFB1) (NM_001130916) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TGF beta Receptor I
Synonyms:	AAT5; ACVRLK4; ALK-5; ALK5; ESS1; LDS1; LDS1A; LDS2A; MSSE; SKR4; tbetaR-I; TBR-i; TBRI; TGFR-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC225697 representing NM\_001130916  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGGCGGCGGTCTGCTCCGCGTCCCGGCTGCTCCTCCTCGTCTGGCGGCGGCGGCGGCGGCGG  
 CGGCGGCGCTGCTCCCGGGGCGACGGCGTTACAGTGTCTGACAAAGACAATTTTAC  
 TTGTGTGACAGATGGGCTCTGCTTTGTCTCTGTACAGAGACCACAGACAAAGTTATACACAACAGCATG  
 TGTATAGCTGAAATTGACTTAATCCTCGAGATAGGCCGTTTGTATGTGCACCCTCTCAAAAAGTGGT  
 CTGTGACTACAACATATTGCTGCAATCAGGACATTGCAATAAAATAGAAGTTCAAACTACTGGTTTACC  
 ATTGCTTGTTCAGAGAACAATTGCGAGAATTTGTGTTACAAGAAAGCATTGGCAAAGGTCGATTTGGA  
 GAAGTTTGGAGAGAAAGTGGCGGGGAGAAGAAGTTGCTGTTAAGATATTCTCTCTAGAGAAGAAGCTT  
 CGTGGTCCGTGAGGCAGAGATTTATCAAAGTAAATGTTACGTCATGAAAACATCCTGGGATTTATAGC  
 AGCAGACAATAAAGACAATGGTACTTGGACTCAGCTCTGGTTGGTGTGAGATTATCATGAGCATGGATCC  
 CTTTTTGATTACTTAAACAGATACACAGTTACTGTGGAAGGAATGATAAACTTGTCTGTCCACCGGCGA  
 GCGGTCTTGCCATCTTACATGGAGATTGTTGGTACCCAAGGAAAGCCAGCCATTGCTCATAGAGATT  
 GAAATCAAAGAATATCTTGGTAAAGAAGAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAA  
 CATGATTCAGCCACAGATACCATGATATTGCTCAAACCACAGAGTGGGAACAAAAAGGTACATGGCCC  
 CTGAAGTTCTCGATGATTCATAAATATGAAACATTTTGAATCCTTCAAACGTGCTGACATCTATGCAAT  
 GGGCTTAGTATTCTGGGAAATGCTCGACGATGTTCCATTGGTGGAAATTCATGAAGATTACCAACTGCCT  
 TATTATGATCTTGTACCTTCTGACCCATCAGTTGAAGAAATGAGAAAAGTTGTTTGTGAACAGAAGTTAA  
 GGCCAAATATCCCAAACAGATGGCAGAGCTGTGAAGCCTTGAGAGTAATGGCTAAAATATGAGAGAATG  
 TTGGTATGCCAATGGAGCAGTAGGCTTACAGCATTGCGGATTAAGAAAACATTATCGCAACTCAGTCAA  
 CAGGAAGGCATCAAATG

**ACGCGT**ACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC225697 representing NM\_001130916  
 Red=Cloning site Green=Tags(s)

MEAAVAAPRPRLLLLVLAIAAAAAAAAAALLPGATALQCFCHLCTKDNFTCVTDGLCFVSVTETTDKVIHNSM  
 CIAEIDLIPDRPFVCPSSKTSVTTTYCCNQDHCNKIELPTTGLPLLQRTIARTIVLQESIGKGRFG  
 EVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS  
 LFDYLNRYTVTVEGMIKLALSTASGLAHLHMEIVGTQGKPAIAHRDLKSKNILVKKNGTCCIADLGLAVR  
 HDSATDTIDIAPNHRVGTKRYMAPEVLDD SINMKHFESFKRADIYAMGLVFWEIARRCSIGGIHEDYQLP  
 YYDLVSPDPSVEEMRKVVCEQKLRPNIPNRWQSCEALRVMAKIMRECWYANGAARLTALRIKKTLSQLSQ  
 QEGIKM

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001130916

**ORF Size:** 1278 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.

**RefSeq:** [NM\\_001130916.3](#)

**RefSeq ORF:** 1281 bp

**Locus ID:** 7046

**UniProt ID:** [P36897](#)

**Cytogenetics:** 9q22.33

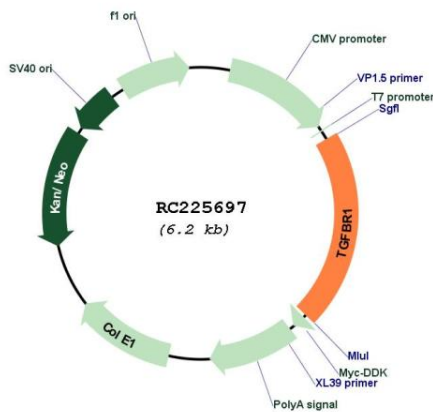
**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**Protein Pathways:** Adherens junction, Chronic myeloid leukemia, Colorectal cancer, Cytokine-cytokine receptor interaction, Endocytosis, MAPK signaling pathway, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway

**MW:** 47.69 kDa

**Gene Summary:** The protein encoded by this gene forms a heteromeric complex with type II TGF-beta receptors when bound to TGF-beta, transducing the TGF-beta signal from the cell surface to the cytoplasm. The encoded protein is a serine/threonine protein kinase. Mutations in this gene have been associated with Loeys-Dietz aortic aneurysm syndrome (LDAS). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2008]

**Product images:**



Circular map for RC225697