

Product datasheet for **RG225697**

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:	TurboGFP
Symbol:	TGFB1
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-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG225697 representing NM_001130916
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGGCGGCGGTCTGCTCCGCGTCCCGGCTGCTCCTCCTCGTGTGGCGGCGGCGGCGGCGGCGG
 CGGCGGCGCTGCTCCCGGGGCGACGGCGTTACAGTGTTTCTGCCACCTCTGTACAAAAGACAATTTTAC
 TTGTGTGACAGATGGGCTCTGCTTTGTCTCTGTACAGAGACCACAGACAAAGTTATACACAACAGCATG
 TGTATAGCTGAAATTGACTTAATCCTCGAGATAGGCCGTTTGTATGTGCACCCTCTTCAAAAAGTGGT
 CTGTGACTACAACATATTGCTGCAATCAGGACATTGCAATAAAATAGAAGTTTCAAACTACTGGTTTACC
 ATTGCTTGTTCAGAGAACAATTGCGAGAATTTGTGTTACAAGAAAGCATTGGCAAAGGTGATTTGGA
 GAAGTTTGGAGAGAAAGTGGCGGGGAGAAGAAGTTGCTGTTAAGATATTCTCTCTAGAGAAGAAGCTT
 CGTGGTCCGTGAGGCAGAGATTATCAAAGTAAATGTTACGTCATGAAAACATCCTGGGATTTATAGC
 AGCAGACAATAAAGACAATGGTACTTGGACTCAGCTCTGGTTGGTGTGAGATTATCATGAGCATGGATCC
 CTTTTGATTACTTAAACAGATACACAGTTACTGTGGAAGGAATGATAAACTTGTCTGTCCACGGCGA
 GCGGTCTTGCCTTCTCACATGGAGATTGTTGGTACCCAAGGAAAGCCAGCCATTGCTCATAGAGATT
 GAAATCAAAGAATATCTTGGTAAAGAAGAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGTAAAGT
 CATGATTCAGCCACAGATACCATGATATTGCTCCAAACCACAGAGTGGGAACAAAAAGGTACATGGCCC
 CTGAAGTTCTCGATGATTCATAAATATGAAACATTTGAATCCTTCAAACGTGCTGACATCTATGCAAT
 GGGCTTAGTATTCTGGGAAATTTGCTCGACGATGTTCCATTGGTGGAAATTCATGAAGATTACCAACTGCCT
 TATTATGATCTTGTACCTTCTGACCCATCAGTTGAAGAAATGAGAAAAGTTGTTTGTGAACAGAAGTTAA
 GGCCAAATATCCAAACAGATGGCAGAGCTGTGAAGCCTTGAGAGTAATGGCTAAAATATGAGAGAATG
 TTGGTATGCCAATGGAGCAGCTAGGCTTACAGCATTGCGGATTAAGAAAACATTATCGCAACTCAGTCAA
 CAGGAAGGCATCAAATG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG225697 representing NM_001130916
 Red=Cloning site Green=Tags(s)

MEAAVAAPRPRLLLLVLAIAAAAAAAAAALLPGATALQCFCHLCTKDNFTCVTDGLCFVSVTETTDKVIHNSM
 CIAEIDLIPRDRPFVPCAPSSKTGSVTTTYCCNQDHCNKIELPTTGLPLL VQRTIARTIVLQESIGKGRFG
 EVWRGKWRGEEVAVKIFSSREERSWFREAEIYQTVMLRHENILGFIAADNKDNGTWTQLWLVS DYHEHGS
 LFDYLNRYTVTVEGMIKLALSTASGLAHLHMEIVGTQGKPAIAHRDLKSKNILVKKNGTCCIADLGLAVR
 HDSATDTIDIAPNHRVGTKRYMAPEVLDD SINMKHFESFKRADIYAMGLVFWEIARRCSIIGGIHEDYQLP
 YYDLVPSDPSVEEMRKVVCEQKLRPNIPNRWQSCEALRVMAKIMRECWYANGAARLTALRIKKTLSQLSQ
 QEGIKM

TRTRPLE – GFP Tag – V

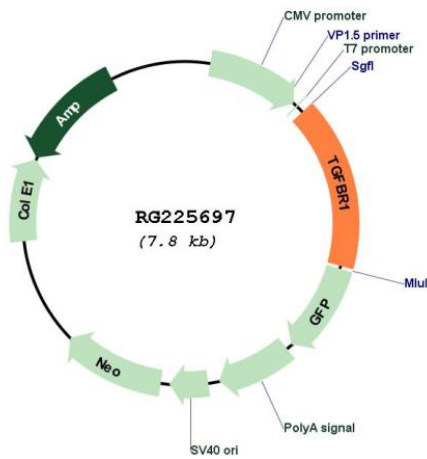
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



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:	<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_001130916.3
RefSeq Size:	6244 bp
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
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]