

## Product datasheet for **RC223209**

### TGF beta Receptor II (TGFB2) (NM\_001024847) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TGF beta Receptor II (TGFB2) (NM_001024847) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TGF beta Receptor II
Synonyms:	AAT3; FAA3; LDS1B; LDS2; LDS2B; MFS2; RIIC; TAAD2; TBR-ij; TBRII; TGFbeta-RII; TGFR-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC223209 representing NM\_001024847  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGTCGGGGCTGCTCAGGGCCTGTGGCCGTGCACATCGTCTGTGGACGCGTATCGCCAGCACGA  
 TCCACCGCACGTTTCAAGTCGGATGTGAAATGGAGGCCAGAAAGATGAAATCATCTGCCCCAGCTG  
 TAATAGGACTGCCATCCACTGAGACATATTAATAACGACATGATAGTCACTGACAACAACGGTGCAGTC  
 AAGTTTCCACAACGTGTAAATTTGTGATGTGAGATTTTCCACCTGTGACAACCAGAAATCCTGCATGA  
 GCAACTGCAGCATCACCTCCATCTGTGAGAAGCCACAGGAAGTCTGTGTGGCTGTATGGAGAAAAGATGA  
 CGAGAACATAACACTAGAGACAGTTTGGCCATGACCCCAAGCTCCCCTACCATGACTTTATTCTGGAAGAT  
 GCTGCTTCTCAAAGTGCATTATGAAGGAAAAAAAAAGCCTGGTGGAGACTTTCTCATGTGTTCTGTGA  
 GCTCTGATGAGTGAATGACAACATCATTTCTCAGAAGATATAACACCAGCAATCCTGACTTGTGCT  
 AGTCATATTTCAAGTGACAGGCATCAGCCTCCTGCCACCTGGGAGTTGCCATATCTGTATCATCATC  
 TTCTACTGCTACCGCGTTAACCGGCAGCAGAAGCTGAGTTCAACCTGGGAAACCGCAAGACGCGGAAGC  
 TCATGGAGTTCAGCGAGCACTGTGCCATCATCCTGGAAGATGACCGCTCTGACATCAGCTCCACGTGTGC  
 CAACAACATCAACCACAACACAGAGCTGCTGCCATTGAGCTGGACACCTGGTGGGAAAAGTCCGCTTT  
 GCTGAGGTCTATAAGGCCAAGCTGAAGCAGAACACTTCAGAGCAGTTTGGAGAGTGGCAGTCAAGATCT  
 TTCCCTATGAGGAGTATGCCTCTTGAAGACAGAGAAGGACATCTTCTCAGACATCAATCTGAAGCATGA  
 GAACATACTCCAGTTCCTGACGGCTGAGGAGCGGAAGACGGAGTTGGGAAAACAATACTGGCTGATCACC  
 GCCTTCCACGCCAAGGGCAACCTACAGGAGTACCTGACGCGGCATGTATCAGCTGGGAGGACCTGCGCA  
 AGCTGGCAGCTCCCTCGCCCGGGGATTGCTCACCTCCACAGTGTATCACACTCCATGTGGGAGGCCCAA  
 GATGCCCATCGTGACAGGGACCTCAAGAGCTCCAATATCCTCGTGAAGAACGACCTAACCTGCTGCCTG  
 TGTGACTTTGGCTTTCCCTGCGCTGGACCCTACTCTGTCTGTGGATGACCTGGCTAACAGTGGGAGG  
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 CAAGCAGACCGATGTCTACTCCATGGCTCTGGTCTCTGGGAAATGACATCTCGTGAATGCAGTGGGA  
 GAAGTAAAAGATTATGAGCCTCCATTTGGTTCCAAGGTGCGGGAGCACCCCTGTGTGAAAGCATGAAGG  
 ACAACGTGTTGAGAGATCGAGGGCAGCCAGAAATCCCAGCTTCTGGCTCAACCACAGGGCATCCAGAT  
 GGTGTGTGAGACGTTGACTGAGTGTGGACCACGACCCAGAGGCCCGTCTCACAGCCAGTGTGTGGCA  
 GAACGCTTCAGTGAAGTCTGGACAGGCTCTCGGGAGGAGCTGCTCGGAGGAGAAGATTCCTG  
 AAGACGGCTCCCTAAACTACCAA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC223209 representing NM\_001024847  
 Red=Cloning site Green=Tags(s)

MGRGLLRGLWPLHIVLWTRIASTIPPHVQKSDVEMEAQKDEIICPSCNRTAHPLRHINNDMIVTDNNGAV  
 KFPQLCKFCDFRFSTCDNQKSCMSNCSITSICEKQEVCAVVRKNDENITLETVCHDPKLPYHDFILED  
 AASPKCIMKEKKKPGETFFMCSDECDNIIIFSEEYNTSNPDLVVIFQVTGISLLPPLGVAISVII  
 FYCYRVRNQKLSSWTETGKTRKLMFSEHCAIILEDSDISSTCANNINHNTELLPIELDTLVGKGRF  
 AEVYKAKLKQNTSEQFETVAVKIFPYEEYASWKTEKDIFSDINLKHENILQFLTAERKTELKQYWLIT  
 AFHAKGNLQEYLTRHVISWEDLRKLGSSLRGIAHLHSDHTPCGRPKMPIVHRDLKSSNILVKNDLTCCL  
 CDFGLSLRLDPTLSVDDLANSQVGTARYMAPEVLESRMNLENVSEFKQTDVYSMALVLEWEMTSRCNAV  
 EVKDYEPFPGSKVREHPCVSMKDNVLRDRGRPEIPSWLHNHGIQMVCELTTECWDHDPPEARLTAQCVA  
 ERFSELEHLDRLSGRSCSEKIPEDGSLNNTK

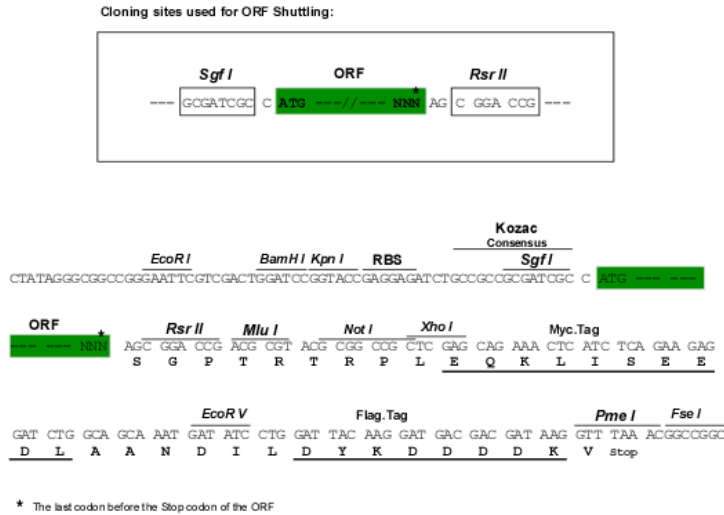
SGP**TRRRLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4493\\_c05.zip](https://cdn.origene.com/chromatograms/mg4493_c05.zip)

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM\_001024847

ORF Size: 1776 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\\_001024847.2](#)

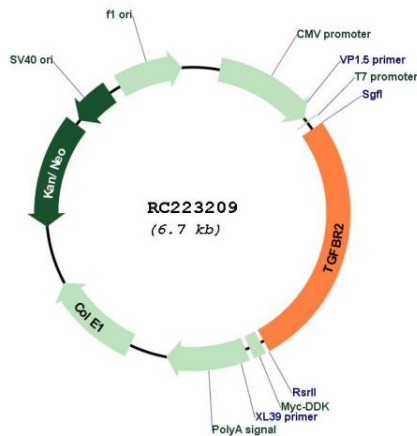
RefSeq Size: 4714 bp

RefSeq ORF: 1779 bp

Locus ID: 7048

<b>UniProt ID:</b>	<u><a href="#">P37173</a></u>
<b>Cytogenetics:</b>	3p24.1
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Protein Pathways:</b>	Adherens junction, Chronic myeloid leukemia, Colorectal cancer, Cytokine-cytokine receptor interaction, Endocytosis, MAPK signaling pathway, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway
<b>MW:</b>	67.46 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a transmembrane protein that has a protein kinase domain, forms a heterodimeric complex with TGF-beta receptor type-1, and binds TGF-beta. This receptor/ligand complex phosphorylates proteins, which then enter the nucleus and regulate the transcription of genes related to cell proliferation, cell cycle arrest, wound healing, immunosuppression, and tumorigenesis. Mutations in this gene have been associated with Marfan Syndrome, Loeys-Deitz Aortic Aneurysm Syndrome, and the development of various types of tumors. Alternatively spliced transcript variants encoding different isoforms have been characterized. [provided by RefSeq, Aug 2017]

**Product images:**



Circular map for RC223209