

Product datasheet for **RG223209**

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



[View online »](#)

ORF Nucleotide Sequence:

>RG223209 representing NM_001024847
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTCGGGGCTGCTCAGGGCCTGTGGCCGCTGCACATCGTCTGTGGACGCGTATCGCCAGCACGA
 TCCCACCGCACGTTTCAAGTCGGATGTGAAATGGAGGCCAGAAAGATGAAATCATCTGCCCCAGCTG
 TAATAGGACTGCCCATCCACTGAGACATATTAATAACGACATGATAGTCACTGACAACAACGGTGCAGTC
 AAGTTTCCACAACGTGTAAATTTGTGATGTGAGATTTTCCACCTGTGACAACCAGAAATCCTGCATGA
 GCAACTGCAGCATCACCTCCATCTGTGAGAAGCCACAGGAAGTCTGTGTGGCTGTATGGAGAAAAGATGA
 CGAGAACATAACACTAGAGACAGTTTGGCCATGACCCCAAGCTCCCCTACCATGACTTTATTCTGGAAGAT
 GCTGCTTCTCAAAGTGCATTATGAAGGAAAAAAAAAGCCTGGTGAAGTCTTTCATGTGTTCTGTGTA
 GCTCTGATGAGTGAATGACAACATCATCTTCTCAGAAGATATAACACCAGCAATCCTGACTTGTGCT
 AGTCATATTTCAAGTACAGGCATCAGCCTCCTGCCACCTGGGAGTTGCCATATCTGTATCATCATC
 TTCTACTGCTACCGCGTTAACCGGCAGCAGAAGCTGAGTTCAACCTGGGAAACCGCAAGACGGGAAGC
 TCATGGAGTTCAGCGAGCACTGTGCCATCATCCTGGAAGATGACCGCTCTGACATCAGCTCCACGTGTGC
 CAACAACATCAACCACAACACAGAGCTGCTGCCATTGAGCTGGACACCTGGTGGGAAAGGTCGCTTT
 GCTGAGGTCTATAAGGCCAAGCTGAAGCAGAACACTTCAGAGCAGTTTGGAGAGTGGCAGTCAAGATCT
 TTCCCTATGAGGAGTATGCCTCTTGAAGACAGAGAAGGACATCTTCTCAGACATCAATCTGAAGCATGA
 GAACATACTCCAGTTCCTGACGGCTGAGGAGCGGAAGACGGAGTTGGGAAACAATACTGGCTGATCACC
 GCCTTCCACGCCAAGGGCAACCTACAGGAGTACCTGACGCGCATGTATCAGCTGGGAGGACCTGCGCA
 AGCTGGGACGCTCCCTCGCCCGGGGATTGCTCACCTCCACAGTATCACACTCCATGTGGGAGCCCA
 GATGCCCATCGTGACAGGGACCTCAAGAGCTCCAATATCCTCGTGAAGAACGACCTAACCTGCTGCCTG
 TGTGACTTTGGCTTTCCCTGCGCTGGACCCTACTCTGTCTGTGGATGACCTGGCTAACAGTGGGACGG
 TGGAACTGCAAGATACATGGCTCCAGAAGTCTAGAATCCAGGATGAATTTGGAGAATGTTGAGTCCTT
 CAAGCAGACCGATGTCTACTCCATGGCTCTGGTCTCTGGGAAATGACATCTCGTGAATGCAGTGGGA
 GAAGTAAAAGATTATGAGCCTCCATTTGGTTCCAAGGTGCGGGAGCACCCCTGTGTGAAAGCATGAAGG
 ACAACGTGTTGAGAGATCGAGGGCAGCCAGAAATCCCAGCTTCTGGCTCAACCACAGGGCATCCAGAT
 GGTGTGTGAGACGTTGACTGAGTGTGGACCACGACCCAGAGGCCCGTCTCACAGCCAGTGTGTGGCA
 GAACGCTTCAGTGAAGTCTGGACAGGCTCTCGGGAGGAGCTGCTCGGAGGAGAAGATTCCTG
 AAGACGGCTCCCTAAACTACAAA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

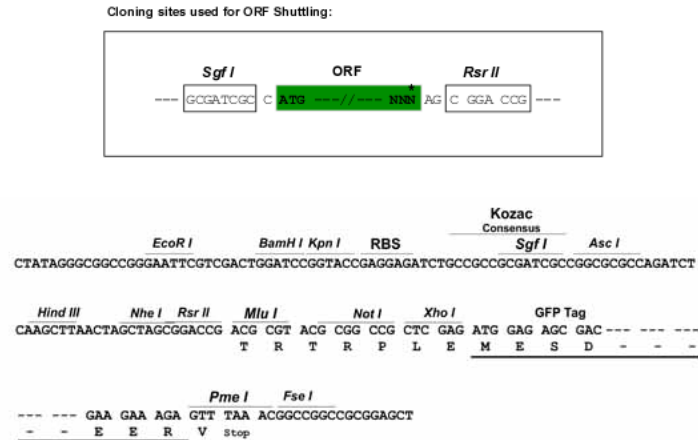
>RG223209 representing NM_001024847
 Red=Cloning site Green=Tags(s)

MGRGLLRGLWPLHIVLWTRIASTIPPHVQKSDVEMEAQKDEIICPSCNRTAHPLRHINNDMIVTDNNGAV
 KFPQLCKFCVRFSTCDNQKSCMSNCSITSICEKPEVCVAVWRKNDENITLETVCHDPKLPYHDFILED
 AASPKCIMKEKKKPGETFFMCSDECDNIIIFSEEYNTSNPDLVVIFQVTGISLLPPLGVAISVII
 FYCYRVRNQKLSSWTETGKTRKLMFSEHCIILEDSDISSTCANNINHNTELLPIELDTLVGKGRF
 AEVYKAKLKQNTSEQFETVAVKIFPYEEYASWKTEKDIFSDINLKHENILQFLTAERKTEL GKQYWLIT
 AFHAKGNLQEYL TRHVISWEDLRKL GSSLARGIAHLHSDHTPCGRPKMPIVHRDLKSSNILVKNDLTCLL
 CDFGLSLRLDPTLSVDDLANSQVGTARYMAPEVLESRMNLNVEVSKQTDVYSMALVLWEMTSRCNAVG
 EVKDYEPFPGSKVREHPCVSMKDNVLRDRGRPEIPSWL NHQGIQMV CETLTCWDHDPPEARLTAQCVA
 ERFSELEHLDRLSGRSCSEEEKIPEDGSLNNTTK

SGP**TRRRLE** - GFP Tag - V

Restriction Sites:

Sgfl-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

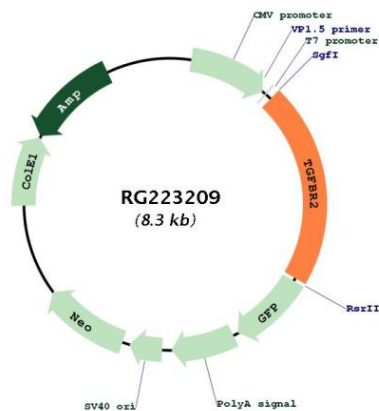
Locus ID: 7048

UniProt ID: [P37173](#)

Cytogenetics: 3p24.1

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 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, Loays-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 RG223209