

Product datasheet for **MC219060**

Tgfbr2 (NM_029575) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tgfbr2 (NM_029575) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tgfbr2
Synonyms:	1110020H15Rik; AU042018; DNIIR; RIIDN; TbetaR-II; TbetaRII; TBR-II
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >NM_029575.3
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGTCGGGGCTGCTCCGGGCTGTGGCCGCTGCATATCGTCTGTGGACGCGCATCGCCAGCACGA
TCCCGCCGACGTTCCCAAGTCGGTTAACAGTGATGTCATGGCCAGCGACAATGGCGGTGCGGTCAAGCT
TCCACAGCTGTGCAAGTTTTGCGATGTGAGACTGTCCACTTGCACAAACAGAAGTCTGCATGAGCAAC
TGCAGCATCACGGCCATCTGTGAGAAGCCGCATGAAGTCTGCGTGGCCGTGTGGAGGAAGAACGACAAGA
ACATTACTCTGGAGACGGTTTGGCACGACCCCAAGCTCACCTACCACGGCTTCACTCTGGAAGATGCCGC
TTCTCCCAAGTGTGCATGAAGGAAAAGAAAAGGGCGGGCGAGACTTTCTTCATGTGTGCCTGTAACATG
GAAGAGTGCAACGATTACATCATCTTTTCGGAAGAATACACCACCAGCAGTCCCGACCTGTTGTTGGTCA
TTATCCAAGTGACGGGTGTCAGCCTCCTGCCTCCGCTGGGGATTGCCATAGCTGCATCATCATCTTCTA
CTGCTACCGTGTCCACCGCAGCAGAAGCTGAGCCCGTCTGGGAGAGCAGCAAGCCCCGAAACTGATG
GATTTTCAGTGACAATTGTGCCATCATCCTGGAGGACGACCGCTCCGACATCAGCTCCACGTGCGCCAACA
ACATCAACCACAACACGGAGCTGCTGCCATCGAGCTGGACACGCTGGTGGGGAAGGGCCGCTTCGCCGA
GGTCTACAAGGCCAAGCTGAAGCAGAACACCTCAGAGCAGTTTGGAGCCGTGGCTGTCAAGATCTTCCCC
TACGAGGAGTACTCCTCGTGGAAAACAGAGAAGGACATCTTCTCCGATATCAACCTGAAGCATGAGAACA
TCCTGCAGTTCCTGACGGCCGAGGAGCGGAAGACAGAGCTGGGCAAGCAGTACTGGCTGATCACGGCGTT
CCACGCGAAGGGCAACCTGCAGGAGTACCTCACGAGGCATGTATCAGCTGGGAGGACCTGAGGAAGCTG
GGCAGCTCCCTGGCCCGGGCATCGCTCATCTCCACAGTGACCACACTCCTTGTGGGAGGCCAAGATGC
CCATTGTTACAGGGACCTCAAGAGCTTAACATCCTAGTGAAGAACGACTTGACCTGTTGCCTGTGTGA
CTTCGGGCTGTCTTGCCTGGACCCTACTCTGTCTGTGGATGACCTGGCCAACAGCGGGCAGGTGGGA
ACGGCAAGATACATGGCCCCGGAAGTTCTAGAATCCAGGATGAATCTGGAAAACGTGGAGTCTTCAAGC
AGACGGATGTCTACTCCATGGCTCTGGTACTCTGGGAAATGACGTCCCGCTGCAATGCTGTGGGAGAAGT
GAAGGATTACGAGCCCCATTTGGTTCCAAGGTGCGGGAGCACCCCTGTGTGGAGAGCATGAAAGACAGT
GTGCTGAGAGACCGAGGGCGCCGAAATTTCCAGCTTCTGGCTCAACCACCAGGGCATCCAGATCGTGT
GTGAGACTTTGACCGAGTGTGGACCATGACCCCGAAGCCGCTCACAGCACAGTGTGTGGCAGAGCG
CTTCAGTGAGCTGGAGCATCCGGAGAGACTCTCTGGGAGGAGCTGCTCCAGGAGAAGATTCCAGAAGAT
GGCTCGCTGAACACTACCAATAG

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1514_e05.zip

Restriction Sites: SgfI-MluI

ACCN: NM_029575

Insert Size: 1704 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_029575.3 , NP_083851.3
RefSeq Size:	4728 bp
RefSeq ORF:	1704 bp
Locus ID:	21813
Cytogenetics:	9 68.39 cM
Gene Summary:	<p>Transmembrane serine/threonine kinase forming with the TGF-beta type I serine/threonine kinase receptor, TGFBR1, the non-promiscuous receptor for the TGF-beta cytokines TGFB1, TGFB2 and TGFB3. Transduces the TGFB1, TGFB2 and TGFB3 signal from the cell surface to the cytoplasm and is thus regulating a plethora of physiological and pathological processes including cell cycle arrest in epithelial and hematopoietic cells, control of mesenchymal cell proliferation and differentiation, wound healing, extracellular matrix production, immunosuppression and carcinogenesis. The formation of the receptor complex composed of 2 TGFBR1 and 2 TGFBR2 molecules symmetrically bound to the cytokine dimer results in the phosphorylation and the activation of TGFBR1 by the constitutively active TGFBR2. Activated TGFBR1 phosphorylates SMAD2 which dissociates from the receptor and interacts with SMAD4. The SMAD2-SMAD4 complex is subsequently translocated to the nucleus where it modulates the transcription of the TGF-beta-regulated genes. This constitutes the canonical SMAD-dependent TGF-beta signaling cascade. Also involved in non-canonical, SMAD-independent TGF-beta signaling pathways (By similarity).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to isoform 1.</p>