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Product datasheet for MC218257

Tgfbr2 (BC052629) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tgfbr2 (BC052629) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tgfbr2
Synonyms:	DNIIR, RIIDN, TbetaRII, TbetaR-II
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin

View online »

Fully Sequenced ORF:

>BC052629
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGTCGGGGGCTGCTCCGGGGCCTGTGGCCGCTGCATATCGTCCTGTGGACGCGCATCGCCAGCACGA
TCCCGCCGCACGTTCCCAAGTCGGATGTGGAAATGGAAGCCCAGAAAGATGCATCCATCCACCTAAGCTG
TAATAGGACCATCCATCCACTGAAACATTTTAACAGTGATGTCATGGCCAGCGACAATGGCGGTGCGGTC
AAGCTTCCACAGCTGTGCAAGTTTTGCGATGTGAGACTGTCCACTTGCGACAACCAGAAGTCCTGCATGA
GCAACTGCAGCATCACGGCCATCTGTGAGAAGCCGCATGAAGTCTGCGTGGCCGTGTGGAGGAAGAACGA
CAAGAACATTACTCTGGAGACGGTTTGCCACGACCCCAAGCTCACCTACCACGGCTTCACTCTGGAAGAT
GCCGCTTCTCCCAAGTGTGTCATGAAGGAAAAGAAAAGGGCGGGCGAGACTTTCTTCATGTGTGCCTGTA
ACATGGAAGAGTGCAACGATTACATCATCTTTTCGGAAGAATACACCACCAGCAGTCCCGACCTGTTGTT
GGTCATTATCCAAGTGACGGGTGTCAGCCTCCTGCCTCCGCTGGGGATTGCCATAGCTGTCATCATCATC
TTCTACTGCTACCGTGTCCACCGGCAGCAGAAGCTGAGCCCGTCCTGGGAGAGCAGCAAGCCCCGGAAAC
TGATGGATTTCAGTGACAATTGTGCCATCATCCTGGAGGACGACCGCTCCGACATCAGCTCCACGTGCGC
CAACAACATCAACCACAACACGGAGCTGCTGCCCATCGAGCTGGACACGCTGGTGGGGAAGGGCCGCTTC
GCCGAGGTCTACAAGGCCAAGCTGAAGCAGAACACCTCAGAGCAGTTTGAGACCGTGGCTGTCAAGATCT
TCCCCTACGAGGAGTACTCCTCGTGGAAAACAGAGAAGGACATCTTCTCCGATATCAACCTGAAGCATGA
GAACATCCTGCAGTTCCTGACGGCCGAGGAGCGGAAGACAGAGCTGGGCAAGCAGTACTGGCTGATCACG
GCGTTCCACGCGAAGGGCAACCTGCAGGAGTACCTCACGAGGCATGTCATCAGCTGGGAGGACCTGAGGA
AGCTGGGCAGCTCCCTGGCCCGGGGCATCGCTCATCTCCACAGTGACCACACTCCTTGTGGGAGGCCCAA
GATGCCCATTGTTCACAGGGACCTCAAGAGCTCTAACATCCTAGTGAAGAACGACTTGACCTGTTGCCTG
TGTGACTTCGGGCTGTCCTTGCGCCTGGACCCTACTCTGTCTGTGGATGACCTGGCCAACAGCGGGCAGG
TGGGAACGGCAAGATACATGGCCCCGGAAGTTCTAGAATCCAGGATGAATCTGGAAAACGTGGAGTCGTT
CAAGCAGACGGATGTCTACTCCATGGCTCTGGTACTCTGGGAAATGACGTCCCGCTGCAATGCTGTGGGA
GAAGTGAAGGATTACGAGCCCCCATTTGGTTCCAAGGTGCGGGAGCACCCCTGTGTGGAGAGCATGAAAG
ACAGTGTGCTGAGAGACCGAGGGCGGCCGGAAATTCCCAGCTTCTGGCTCAACCACCAGGGCATCCAGAT
CGTGTGTGAGACTTTGACCGAGTGCTGGGACCATGACCCCGAAGCCCGTCTCACAGCACAGTGTGTGGCA
GAGCGCTTCAGTGAGCTGGAGCATCCGGAGAGACTCTCTGGGAGGAGCTGCTCCCAGGAGAAGATTCCAG
AAGATGGCTCGCTGAACACTACCAAATAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: BC052629

Insert Size: 720 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:	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:	BC052629
RefSeq Size:	8165 bp
RefSeq ORF:	1778 bp
Locus ID:	21813
Cytogenetics:	9 68.39 cM
Gene Summary:	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 TGFRB1 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]