

Product datasheet for MR227339

Tgfb1 (NM_011577) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tgfb1 (NM_011577) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tgfb1
Synonyms:	TGF-beta; TGF-beta1; Tgfb; Tgfb-1; TGFbeta; TGFbeta1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR227339 representing NM_011577 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGCCCTCGGGGCTGCGGCTACTGCCGTTCTGCTCCCACTCCCGTGGCTTCTAGTGCTGACGCCCC
GGAGGCCAGCCGCGGACTCTCCACCTGCAAGACCATCGACATGGAGCTGGTAAACGGAAGCGCATCGA
AGCCATCCGTGGCCAGATCCTGTCCAACTAAGGCTCGCCAGTCCCCAAGCCAGGGGGAGGTACCGCCC
GGCCCGTGCCGAGGCGGTGCTCGCTTGTACAACAGCACCCGCGACCGGTGGCAGGGAGAGCGCCC
ACCCAGAGCCGGAGCCGAAGCGGACTACTATGCTAAAGAGGTCACCCGCGTGTAAATGGTGACCGCAA
CAACGCCATCTATGAGAAAACCAAAGACATCTCACACAGTATATATATGTTCTTCAATACGTCAGACATT
CGGAAGCAGTGCCCGAACCCCAATTGCTGTCCCGTGCCAGAGCTGCGCTTGCAGAGATTAATCAAGTG
TGGAGCAACATGTGGAATCTACCAGAAATATAGCAACAATTCCTGGCGTTACCTTGGTAACCGGCTGT
GACCCCACTGATACGCCTGAGTGGCTGTCTTTGACGTCACCTGGAGTTGTACGGCAGTGGCTGAACCA
GGAGACGGAATACAGGGCTTCGATTACGCGCTCACTGCTTGTGACAGCAAAGATAACAACTCCACG
TGGAAATCAACGGGATCAGCCCCAACGTCGGGGCGACCTGGGCACCATCCATGACATGAACCGGCCCT
CCTGCTCTCATGGCCACCCCTGGAAAGGGCCAGCACCTGCACAGCTCACGGCACCGGAGAGCCCTG
GATACCAACTATTGCTTCAGCTCCACAGAGAAGAACTGCTGTGCGGCAGCTGTACATTGACTTTAGGA
AGGACCTGGGTTGGAAGTGGATCCACGAGCCCAAGGGCTACCATGCCAACTTCTGTCTGGGACCCCTGCC
CTATATTTGGAGCCTGGACACACAGTACAGCAAGTCTTGGCCCTCTACAACCAACAACCCGGGCGCT
TCGGCGTACCGTGTGCGTGCCGACGGCTTTGGAGCCACTGCCCATCGTCTACTACGTGGGTGCGAAGC
CCAAGGTGGAGCAGTTGTCCAACATGATTGTGCGCTCCTGCAAGTGCAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR227339 representing NM_011577
 Red=Cloning site Green=Tags(s)

MPPSGLRLLPLLLPLWLLVLTGPRPAAGLSTCKTIDMELVKKRIEAIRGQILSKLRLLASPPSQGEVPP
 GPLPEAVLALYNSTRDRVAGESADPEPEPEADYYAKEVTRVLMVDRNNAIYEKTKDISHSIYMFNTSDI
 REAVPEPPLLRAELRLQRLKSSVEQHVELYQKYSNNSWRYLGNRLLTPTDTPEWL SFDVTGVVRQWLNQ
 GDGIQGFRFSAHCSCDSKDNKLHVEINGISPKRRGDLGTIHDNMRPFLLLMATPLERAQHLHSSRHRRAL
 DTNYCFSSTEKNCCVRQLYIDFRKDLGWKWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGA
 SASPCCVPQALEPLPIVYVYVGRKPKVEQLSNMIVRSCKCS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfi-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_011577

ORF Size: 1170 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_011577.2](#)

RefSeq Size: 2094 bp

RefSeq ORF: 1173 bp

Locus ID: 21803

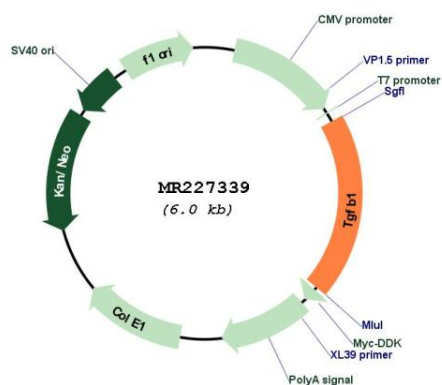
UniProt ID: [P04202](#)

Cytogenetics: 7 13.98 cM

MW: 44.8 kDa

Gene Summary: This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate a latency-associated peptide (LAP) and a mature peptide, and is found in either a latent form composed of a mature peptide homodimer, a LAP homodimer, and a latent TGF-beta binding protein, or in an active form consisting solely of the mature peptide homodimer. The mature peptide may also form heterodimers with other TGF-beta family members. This encoded protein regulates cell proliferation, differentiation and growth, and can modulate expression and activation of other growth factors including interferon gamma and tumor necrosis factor alpha. Mice lacking a functional copy of this gene develop severe multifocal inflammatory disease, yolk sac defects and colon cancer. [provided by RefSeq, Aug 2016]

Product images:



Circular map for MR227339