

## Product datasheet for **MG227339**

### Tgfb1 (NM\_011577) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tgfb1 (NM_011577) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tgfb1
Synonyms:	TGF-beta; TGF-beta1; Tgfb; Tgfb-1; TGFbeta; TGFbeta1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG227339 representing NM_011577 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCCGCCCTCGGGGCTGCGGCTACTGCCGTTCTGCTCCCACTCCCGTGGCTTCTAGTGCTGACGCCCC  
GGAGGCCAGCCGCGGACTCTCCACCTGCAAGACCATCGACATGGAGCTGGTAAACGGAAGCGCATCGA  
AGCCATCCGTGGCCAGATCCTGTCCAACTAAGGCTCGCCAGTCCCCAAGCCAGGGGGAGGTACCGCCC  
GGCCCGTGCCGAGGCGGTGCTCGCTTGTACAACAGCACCCGCGACCGGTGGCAGGGAGAGCGCCC  
ACCCAGAGCCGGAGCCGAAGCGGACTACTATGCTAAAGAGGTCACCCGCGTGTAAATGGTGGACCGCAA  
CAACGCCATCTATGAGAAAACCAAAGACATCTCACACAGTATATATATGTTCTTCAATACGTCAGACATT  
CGGAAGCAGTGCCCGAACCCCAATTGCTGTCCCGTGCAGAGCTGCGCTTGCAGAGATTAATCAAGTG  
TGGAGCAACATGTGGAATCTACCAGAAATATAGCAACAATTCCTGGCGTTACCTTGGTAACCGGCTGCT  
GACCCCACTGATACGCCTGAGTGGCTGTCTTTGACGTCACCTGGAGTTGTACGGCAGTGGCTGAACCA  
GGAGACGGAATACAGGGCTTCGATTACGCGCTCACTGCTTGTGACAGCAAAGATAACAACTCCACG  
TGGAAATCAACGGGATCAGCCCCAACGTCGGGGCGACCTGGGCACCATCCATGACATGAACCGGCCCT  
CCTGCTCCTCATGGCCACCCCTGGAAAGGGCCAGCACCTGCACAGCTCACGGCACCGGAGAGCCCTG  
GATACCAACTATTGCTTCAGCTCCACAGAGAAGAACTGCTGTGCGGCAGCTGTACATTGACTTTAGGA  
AGGACCTGGGTTGGAAGTGGATCCACGAGCCCAAGGGCTACCATGCCAACTTCTGTCTGGGACCCTGCC  
CTATATTTGGAGCCTGGACACACAGTACAGCAAGTCTTGGCCCTCTACAACCAACAACCCGGGCGCT  
TCGGCGTACCGTGTGCGTGCCGACGGCTTTGGAGCCACTGCCCATCGTCTACTACGTGGGTGCGAAGC  
CCAAGGTGGAGCAGTTGTCCAACATGATTGTGCGCTCCTGCAAGTGCAGC

**ACCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >MG227339 representing NM\_011577  
 Red=Cloning site Green=Tags(s)

MPPSGLRLLPLLLPLPWLVLTPGRPAAGLSTCKTIDMELVKRKRIEAIRGQILSKLRLASPPSQGEVPP  
 GPLPEAVLALYNSTRDRVAGESADPEPEPEADYYAKEVTRVLMVDRNNAIYEKTKDISHSIYMFFNTSDI  
 REAVPEPPLLRAELRLQRLKSSVEQHVELYQKYSNNSWRYLGNRLLTPTDTPEWLSFDVTGVVRQWLNQ  
 GDGIQGFRRFSAHCSCDSKDNKLHVEINGISPKRRGDLGTIHDNRPFLLLMATPLERAQHLHSSRHRRAL  
 DTNYCFSSTEKNCCVRQLYIDFRKDLGWKWIHEPKGYHANFCLGPCPYIWSLDTQYSKVLALYNQHNPGA  
 SASPCCVPQALEPLPIVYVYVGRKPKVEQLSNMIVRSCKCS

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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.

**RefSeq:** [NM\\_011577.2](#)

**RefSeq Size:** 2094 bp

**RefSeq ORF:** 1173 bp

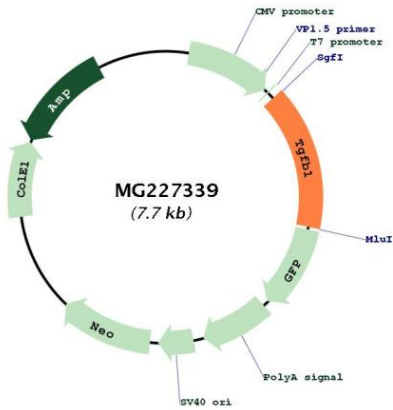
**Locus ID:** 21803

**UniProt ID:** [P04202](#)

**Cytogenetics:** 7 13.98 cM

**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 MG227339