

## Product datasheet for MR225633

### Tgfb2 (NM\_009367) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tgfb2 (NM_009367) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tgfb2
Synonyms:	BB105277; Tgf-beta; Tgf-beta2; Tgfb-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR225633 representing NM_009367 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCACTACTGTGTGCTGAGCACCTTTTTGCTCCTGCATCTGGTCCCGGTGGCGCTCAGTCTGTCTACCT  
GCAGCACCTCGACATGGATCAGTTTATGCGCAAGAGGATCGAGGCCATCCGCGGGCAGATCCTGAGCAA  
GCTGAAGCTCACCAGCCCCCGGAAGACTATCCGGAGCCGGATGAGGTCCCCCGGAGGTGATTTCCATC  
TACAACAGTACCAGGGACTTACTGCAGGAGAAGGCAAGCCGGAGGGCAGCCGCCTGCGAGCGGAGCGGA  
GCGACGAGGAGTACTACCCAAGGAGTTTATAAAATCGACATGCCGTCCACCTCCCCTCCGAAAATGC  
CATCCCGCCCACTTTCTACAGACCCTACTTCAGAATCGTCCGCTTTGATGTCTCAACAATGGAGAAAAAT  
GCTTCGAATCTGGTGAAGGCAGAGTTCAGGGTCTTCCGCTTGCAAAACCCCAAAGCCAGAGTGGCCGAGC  
AGCGGATTGAACTGTATCAGATCCTTAAATCCAAGACTTAACATCTCCCACCCAGCGCTACATCGATAG  
CAAGGTTGTGAAAACCAGAGCGGAGGGTGAATGGCTCTCCTTCGACGTGACAGACGCTGTGCAGGAGTGG  
CTTCACCACAAAGACAGGAACCTGGGGTTAAAATAAGTTTACACTGCCCTGCTGTACCTTCGTGCCGT  
CTAATAATTACATCATCCGAATAAAAGCGAAGAGCTCGAGGCGAGATTTGCAGGTATTGATGGCACCTC  
TACATATGCCAGTGGTGATCAGAAAATATAAAGTCCACTAGGAAAAAACAGTGGGAAGACCCACAT  
CTCCTGCTAATGTTGTTGCCCTCTACAGACTGGAGTACAACAGTCCAGCCGGCGGAAGAGCGCCGCTT  
TGGATGCTGCCTACTGCTTTAGAAATGTGCAGGATAATTGCTGCCTTCGCCCTTTTACATTGATTTTAA  
GAGGGATCTTGGATGAAATGGATCCATGAACCCAAAGGGTACAATGCTAACTTCTGTGCTGGGGCATGC  
CCATATCTATGGAGTTCAGACACTCAACACACCAAAGTCCCTCAGCCTGTACAACACCATAAATCCCGAAG  
CTTCCGCTTCCCCTTGTGTGTGTCCCAGGATCTGGAACCACTGACCATTCTCTATTACATTGAAAATAC  
GCCAAGATCGAACAGCTTTCGAATGATTGTCAAGTCTTGTAATGCAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR225633 representing NM\_009367  
Red=Cloning site Green=Tags(s)

MHYCVLSTFLLLHLVPVALSLSTCSTLDMQFMRKRIEAIRGQILSKLKLTPSPEDYPEPDEVPPEVISI  
 YNSTRDLLQEKASRRAAACERERSDEEYAKEVYKIDMPSHLPSENAIPPTFYRPFYRIVRFDVSTMEKN  
 ASNLVKAEFRVFRLLQNPKARVAEQRIEL YQILKSKDLT SPTQRYIDSKVVKTRAEGEWL SFDVTDVQEW  
 LHHKDRNLGFKISLHPCCTTFVPSNNYIIPNKSEELERFAGIDGTSTYASGDQKTIKSTRKKTSGKTPH  
 LLLMLLPSYRLESQQSSRRKRALDAAYCFRNVQDNCCLRPLYIDFKRDLGWKWIHEPKGYNANFCAGAC  
 PYLWSSDTQHTKVL SLYNTINPEASAPCCVSDLEPLTILYYIGNTPKIEQLSNMIVKSKCS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9030\\_g04.zip](https://cdn.origene.com/chromatograms/mm9030_g04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_009367

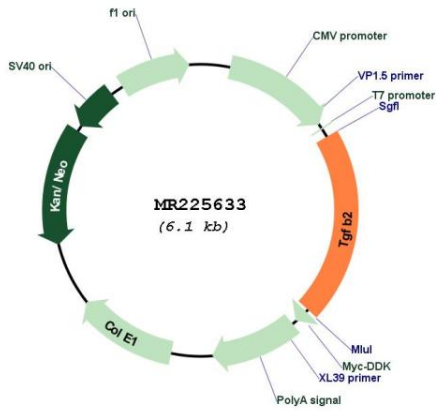
**ORF Size:** 1242 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_009367.4</a>
<b>RefSeq Size:</b>	4725 bp
<b>RefSeq ORF:</b>	1245 bp
<b>Locus ID:</b>	21808
<b>UniProt ID:</b>	<a href="#">P27090</a>
<b>Cytogenetics:</b>	1 89.95 cM
<b>MW:</b>	48 kDa
<b>Gene Summary:</b>	<p>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. Mice lacking a functional copy of this gene display developmental defects in multiple organs and perinatal lethality. Heterozygous mutant mice exhibit aortic root aneurysm. This gene encodes multiple isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Aug 2016]</p>

Product images:



Circular map for MR225633