

Product datasheet for **SC313495**

TGF beta 2 (TGFB2) (M19154) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TGF beta 2 (TGFB2) (M19154) Human Untagged Clone
Tag:	Tag Free
Symbol:	TGF beta 2
Synonyms:	LDS4; TGF-beta2
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for M19154, the custom clone sequence may differ by one or more nucleotides ATGCACTACTGTGTGCTGAGCGCTTTTCTGATCCTGCATCTGGTCACGGTCGCGCTCAGC CTGTCTACCTGCAGCACACTCGATATGGACCAGTTCATGCGCAAGAGGATCGAGGCGATC CGCGGGCAGATCCTGAGCAAGCTGAAGCTCACCAGTCCCCAGAAGACTATCCTGAGCCC GAGGAAGTCCCCCGGAGGTGATTTCCATCTACAACAGCACCAGGGACTTGCTCCAGGAG AAGGCGAGCCGGAGGGCGCCGCTGCGAGCGGAGAGGACGACGAAGAGTACTACGCC AAGGAGGTTTACAAAATAGACATGCCGCCCTTCTCCCTCCGAAACTGTCTGCCAGTT GTTACAACACCCTCTGGCTCAGTGGCAGCTTGTGCTCCAGACAGTCCCAGGTGCTCTGT GGGTACCTTGATGCCATCCCGCCACTTTCTACAGACCCTACTTCAGAATTGTTGATTT GACGTCTCAGCAATGGAGAAGAATGCTTCCAATTTGGTGAAAGCAGAGTTCAGAGTCTTT CGTTTGCAGAACC AAAAGCCAGAGTGCCTGAACAACGGATTGAGCTATATCAGATTCTC AAGTCCAAAGATTTAACATCTCCAACCCAGCGCTACATCGACAGCAAAGTTGTGAAAACA AGAGCAGAAGGCGAATGGCTCTCCTTCGATGTAAGTATGCTGTTTCAATGAATGGCTTAC CATAAAGACAGGAACCTGGGATTTAAAATAAGCTTACACTGTCCCTGCTGCACCTTTGTA CCATCTAATAATTACATCATCCCAAATAAAAGTGAAGAACTAGAAGCAAGATTTGCAGGT ATTGATGGCACCTCCACATATACCAGTGGTGATCAGAAAATAAAAGTCCACTAGGAAA AAAAACAGTGGAAGACCCACATCTCCTGCTAATGTTATTGCCCTCCTACAGACTTGAG TCACAACAGACCAACCGGCGGAAGAAGCGTGCTTTGGATGCGGCCATTGCTTTAGAAAT GTGCAGGATAATTGCTGCCTACGTCCACTTTACATTGATTTCAAGAGGGATCTAGGGTGG AAATGGATACACGAACCCAAAGGGTACAATGCCAATTCTGTGCTGGAGCATGCCCGTAT TTATGGAGTTCAGACACTCAGCACAGCAGGGTCTGAGCTTATATAATACCATAAATCCA GAAGCATCTGCTTCTCCTTGCTGCGTGTCCCAAGATTTAGAACCTTAACCATTCTCTAC TACATTGGCAAAACACCAAGATTGAACAGCTTTCTAATATGATTGTAAGTCTTGCAAA TGCAGC
Restriction Sites:	Please inquire
ACCN:	M19154



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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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<u>M19154.1</u> , <u>AAA50404.1</u>
RefSeq Size:	2570 bp
RefSeq ORF:	690 bp
Locus ID:	7042
Cytogenetics:	1q41
Domains:	TGFb_propeptide, TGF-beta
Protein Families:	Druggable Genome, Secreted Protein, Transmembrane
Protein Pathways:	Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Cytokine-cytokine receptor interaction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway, Pancreatic cancer, Pathways in cancer, Renal cell carcinoma, TGF-beta signaling pathway

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. Disruption of the TGF-beta/SMAD pathway has been implicated in a variety of human cancers. A chromosomal translocation that includes this gene is associated with Peters' anomaly, a congenital defect of the anterior chamber of the eye. Mutations in this gene may be associated with Loeys-Dietz syndrome. This gene encodes multiple isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Aug 2016]