

## Product datasheet for MR205443

### Gdf1 (NM\_001163282) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gdf1 (NM_001163282) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gdf1
Synonyms:	AI385651; Gdf-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205443 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTCCCTGCTGCCATCGTTTTTGGACCACCTCCTCCTCTGCTCTTGCTGCCCTCGACGACCCTGG  
CCCCCGGCCAGCATCCATGGGCCCCGTGCCGCCCTGCTCCAGGTTCTTGGGCTTCCCAGGCGCCCCG  
GAGCGTCCCCACACCCGACCTGTGCCTCTGTCATGTGGCGCTATTCCGTCGCCGCGACCCCCAGGAG  
GCCAGAGTGGGACGCCCTCTGCGGCCATGCCACGTGGAGAACTAGGGGTCGCCGAAACATTGTGCCCC  
ACATCCCCGACAGCGGTCTGTCTCCAGGCCCGCACACCCGCCAGGACCTCGGGGCTGTGCCCCGAGTG  
GACAGTCGCTTTGACCTGTGCAATGTGGAGCCCACAGAGCGCCAACACGCGCGCGCTTAGAGTTGCGG  
CTGGAGGCTGAGAGTGAAGATACAGGGGGTGGGAGCTAAGCGTGGCACTGTGGGCCGACGAGAGCATC  
CAGGGCCTGAGCTGCTGCGCGTGCAGGCCACCAGGGGTGCTCCTGCGCGCAGACCTACTGGGGACTGC  
AGTAGCCGCCAACGCATCAGTGCCTGTACTGTGCGCCTGGCGCTGCTACTGCACCCTGGGGCCACTGCA  
GCCTGTGGGCGCCTGGCTGAGGCCTCCCTGCTGCTGGTACGCTGGACCCACGCCTGTGTCCCTTGCCGC  
GATTGCGCGCCACCGGAGCCCAGGGTAGAAGTTGGTCCAGTGGCACTGTGCGTACCCGACGGTTGCA  
TGTGAGCTTCCGTGAGGTGGGCTGGCACGTTGGGTGATCGCGCCGCGTGGCTTCTAGCCAACCTCTGC  
CAGGGCACGTGCCACTACCCGAAACGCTGAGGGGACCCGGCGGCCCTGCACCAACCACGCTGTGC  
TGCGCGCGCTCATGCACGAGCTGCTCCACCCCGGGTGCAGGCTCGCCCTGCTGCGTGCCAGAGCGTCT  
ATCACCCATCTCCGTGCTCTTCTTCGACAATAGTGACAACGTGGTCTGCGACACTACGAAGACATGGTG  
GTGGATGAGTGTGGCTGCCGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >MR205443 protein sequence  
 Red=Cloning site Green=Tags(s)

MLPVCHRFCDHLLLLLLPSTTLAPAPASMGPAALLQVLGLPEAPRSVPTHRPVPVPMWRLFRRRDPQE  
 ARVGRPLRPCHVEELGVAGNIVRHIPDSGLSSRPAQPARTSGLCPEWTVVFDLSNVEPTERPTRARLELR  
 LEAESEDTGGWELSVALWADAHPGPELLRVPAPPVLLRADLLGTAVAANASVPCTVRLALSLHPGATA  
 ACGRLAEASLLLVTLDPRLCPLPRLRRHTEPRVEVGPVGTCTRRRLHVSFREVGWHRWVIAPRGFLANFC  
 QGTICALPETLRGPGGPPALNHAVLRALMHA AAPTPGAGSPCCVPERLSPI SVLFFDNSDNVLRHYEDMV  
 VDECGCR

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\_001163282

**ORF Size:** 1074 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\\_001163282.2](#)

**RefSeq Size:** 2728 bp

**RefSeq ORF:** 1074 bp

**Locus ID:** 14559

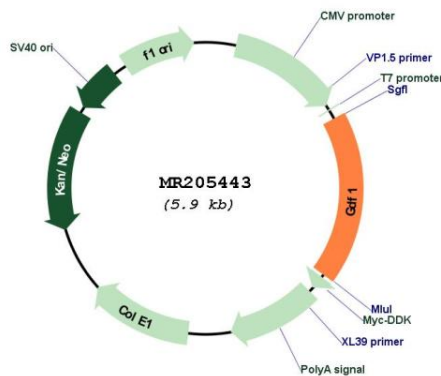
**UniProt ID:** [P20863](#)

**Cytogenetics:** 8 B3.3

**MW:** 38.7 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 each subunit of the disulfide-linked homodimer. This protein is involved in the establishment of left-right asymmetry in early embryogenesis and in neural development in later embryogenesis. This protein is translated from a monocistronic mRNA early in development, and from a bicistronic mRNA in later stages that also encodes ceramide synthase 1. [provided by RefSeq, Jul 2016]

### Product images:



Circular map for MR205443