

Product datasheet for RC205901

GDF3 (NM_020634) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GDF3 (NM_020634) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GDF3
Synonyms:	KFS3; MCOP7; MCOPCB6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205901 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTTCGTTTCTTGCCAGATTTGGCTTTCAGCTTCTGTAAATTCTGGCTTTGGCCAGGCAGTCCAAT
TTCAAGAATATGTCTTTCTCCAATTTCTGGCTTAGATAAGGCGCCTTACCCCAGAAAGTCCAACCTGT
GCCTTATATCTTGAAGAAAATTTCCAGGATCGCGAGGCAGCAGCGACCACTGGGTCTCCCGAGACTTA
TGCTACGTAAAGGAGCTGGCGTCCGCGGAATGACTTCGCTTCTCCAGACCAAGGTTTCTTTCTTT
ACCCAAAGAAAATTTCCAAGCTTCTCTGCCTGCAGAAGCTCTCTACTTTAACCTGTCTGCCATCAA
AGAAAGGGAACAGTTGACATTGGCCAGCTGGGCCTGGACTTGGGGCCCAATTCTTACTATAACCTGGGA
CCAGAGCTGGAAGTGGCTCTGTTCTGGTTCAGGAGCCTCATGTGTGGGGCCAGACCACCCCTAAGCCAG
GTAAAAATGTTGTGTTGCGGTCACTCCCATGGCCACAAGGTGCTGTTCACTTCAACCTGTGGATGTAGC
TAAGGATTGGAATGACAACCCCGGAAAATTTCTGGGTTATTCTGGAGATACTGGTCAAAGAAGATAGA
GACTCAAGGGTGAATTTTCAAGCTGAAGACACCTGTGCCAGACTAAGATGCTCCCTTCATGCTTCCCTGC
TGGTGGTACTCTCAACCCTGATCAGTGCCACCCTTCTCGAAAAGGAGAGCAGCCATCCCTGTCCCAA
GCTTTCTTGAAGAACCTCTGCCACCGTACCAGCTATTCATTAACCTCCGGGACCTGGGTGGCACAAG
TGGATCATTGCCCCAAGGGTTCATGGCAAATTAAGTCCATGGAGAGTGTCCCTCTCACTGACCATCT
CTCTCAACAGCTCCAATTATGCTTTCATGCAAGCCCTGATGCATGCCGTTGACCCAGAGATCCCCAGGC
TGTGTGTATCCCCACCAAGCTGTCTCCATTTCCATGCTCTACCAGGACAATAATGACAATGTCATTCTA
CGACATTATGAAGACATGGTAGTCGATGAATGTGGGTGTGGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC205901 protein sequence
Red=Cloning site Green=Tags(s)

MLRFLPDLAFSLLILALGQAVQFQEYVFLQFLGLDKAPSPQKFQVPVYILKKIFQDREAAATTGVSRL
 CYVKELGVRGNVLRFLPDQGFLLYPKKISQASSCLQKLLYFNL SAIKEREQLTLAQLGLDLGPNSSYYNLG
 PELELALFLVQEPHVWGQTTTPKPGKMFVLRVSPWPQGAHVFNLLDVAKDWNDRKNGFLFLEILVKEDR
 DSRVNFQPEDTCARLRCSLHASLLVVTLPDQCHPSRKRRRAAIPVKLSCKNLCHRHQLFINFRDLGWHK
 WIIAPKGFMANYPCHGECFSLTISLNSSNYAFMQALMHAVDPEIPQAVCIPTKLSPI SMLYQDNNNDNVIL
 RHYEDMVVDECGCG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6178_d02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_020634

ORF Size: 1092 bp

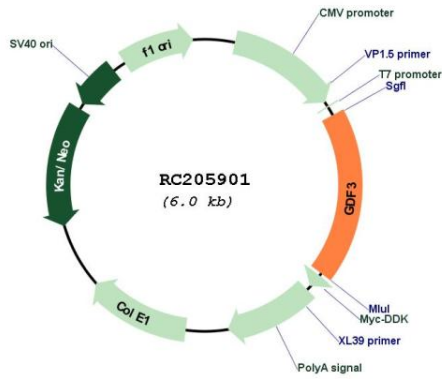
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

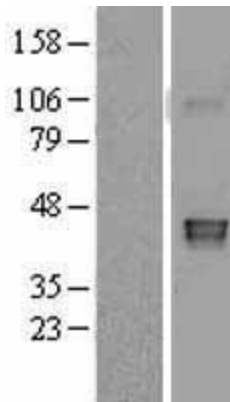
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_020634.3
RefSeq Size:	1224 bp
RefSeq ORF:	1095 bp
Locus ID:	9573
UniProt ID:	Q9NR23
Cytogenetics:	12p13.31
Protein Families:	Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Secreted Protein, Stem cell relevant signaling - TGFb/BMP signaling pathway
MW:	41.5 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 plays a role ocular and skeletal development. Mutations in this gene are associated with microphthalmia, coloboma, and skeletal abnormalities in human patients. [provided by RefSeq, Aug 2016]

Product images:



Circular map for RC205901



Western blot validation of overexpression lysate (Cat# [LY402794]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205901 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).