

## Product datasheet for RC207105L4

#### OriGene Technologies, Inc.

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## GDF 5 (GDF5) (NM\_000557) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** GDF 5 (GDF5) (NM\_000557) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: GDF 5

Synonyms: BDA1C; BMP-14; BMP14; CDMP1; DUPANS; LAP-4; LAP4; OS5; SYM1B; SYNS2

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC207105).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_000557

ORF Size: 1503 bp



### GDF 5 (GDF5) (NM\_000557) Human Tagged Lenti ORF Clone - RC207105L4

**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:** <u>NM 000557.2</u>

 RefSeq Size:
 2344 bp

 RefSeq ORF:
 1506 bp

 Locus ID:
 8200

 UniProt ID:
 P43026

Cytogenetics: 20q11.22

**Protein Families:** Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell

Differentiation/IPS, Secreted Protein, Stem cell relevant signaling - TGFb/BMP signaling

pathway

**Protein Pathways:** Cytokine-cytokine receptor interaction, TGF-beta signaling pathway

**MW:** 55.4 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

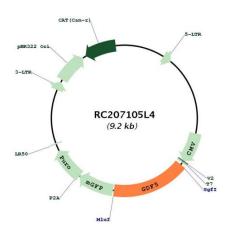
recruitment and activation of SMAD family transcription factors that regulate gene

expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein regulates the development of numerous tissue and cell types, including cartilage, joints, brown fat, teeth, and the growth of neuronal axons and dendrites. Mutations in this gene are associated with acromesomelic dysplasia, brachydactyly, chondrodysplasia, multiple synostoses syndrome, proximal symphalangism,

and susceptibility to osteoarthritis. [provided by RefSeq, Aug 2016]



# **Product images:**



Circular map for RC207105L4