Product datasheet for **RC215533L4**

**FGFR3 (NM_000142) Human Tagged ORF Clone**

**Product data:**

- **Product Type:** Expression Plasmids
- **Product Name:** FGFR3 (NM_000142) Human Tagged ORF Clone
- **Tag:** mGFP
- **Symbol:** FGFR3
- **Synonyms:** ACH; CD333; CEK2; HSFGFR3EX; JTK4
- **Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)
- **E. coli Selection:** Chloramphenicol (34 ug/mL)
- **Cell Selection:** Puromycin
- **ORF Nucleotide Sequence:** The ORF insert of this clone is exactly the same as (RC215533).
- **Restriction Sites:** SgfI-NotI
- **Cloning Scheme:**

```
SgfI ↓ ORF ↑ NotI
--- GCG ATC GGC ATG ... / ... NNN AGC GCG GGC TTC ... 
```

```
EcoRI BamHI RBS Kozak
CTAGGGGCGCCTGGAAATTGGATCTGACTGAGTACGGAAGAGATCTGAGCGCGGATGC C ATG ... --- ---
```

```
ORF NotI XhoI mGFP Tag
--- --- --- --- --- --- --- NNN ACG CCG CTC GAG ATG AGC GGG GGC ... --- --- ---
```

```
--- GGA CTC AGA GTT TGG GTA GGA AGC G L R V
```

* The last codon before the Stop codon of the ORF.

**ACCN:** NM_000142

**ORF Size:** 2418 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 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

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

RefSeq: NM_000142.2, NP_000133.1
RefSeq Size: 4093 bp
RefSeq ORF: 2421 bp
Locus ID: 2261
Cytogenetics: 4p16.3
Domains: pkinase, TyrKc, S_TKc, ig, IGc2, IG
Protein Families: Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways: Bladder cancer, Endocytosis, MAPK signaling pathway, Pathways in cancer, Regulation of actin cytoskeleton
MW: 87.71 kDa
Gene Summary: This gene encodes a member of the fibroblast growth factor receptor (FGFR) family, with its amino acid sequence being highly conserved between members and among divergent species. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein would consist of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. This particular family member binds acidic and basic fibroblast growth hormone and plays a role in bone development and maintenance. Mutations in this gene lead to craniosynostosis and multiple types of skeletal dysplasia. [provided by RefSeq, Aug 2017]
Double digestion of RC215533L4 using SgfI and NotI

Product images: