

Product datasheet for RC219855L4

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

TGF beta Receptor II (TGFBR2) (NM_003242) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: TGF beta Receptor II (TGFBR2) (NM_003242) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: TGF beta Receptor II

Synonyms: AAT3; FAA3; LDS1B; LDS2; LDS2B; MFS2; RIIC; TAAD2; TBR-ii; TBRII; TGFbeta-RII; TGFR-2

Mammalian Cell Puromycin

Selection:

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

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

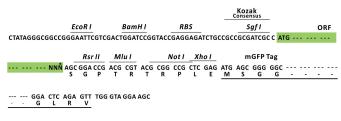
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC219855).

Sequence:

Restriction Sites: Sgfl-Rsrll

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_003242

ORF Size: 1701 bp



TGF beta Receptor II (TGFBR2) (NM_003242) Human Tagged Lenti ORF Clone - RC219855L4

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 003242.4</u>

 RefSeq Size:
 4639 bp

 RefSeq ORF:
 1704 bp

 Locus ID:
 7048

 UniProt ID:
 P37173

Cytogenetics: 3p24.1

Domains: pkinase, TyrKc, S TKc

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Adherens junction, Chronic myeloid leukemia, Colorectal cancer, Cytokine-cytokine receptor

interaction, Endocytosis, MAPK signaling pathway, Pancreatic cancer, Pathways in cancer,

TGF-beta signaling pathway

MW: 64.57 kDa

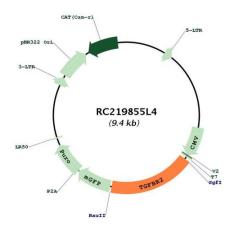
Gene Summary: The protein encoded by this gene is a transmembrane protein that has a protein kinase

domain, forms a heterodimeric complex with TGF-beta receptor type-1, and binds TGF-beta. This receptor/ligand complex phosphorylates proteins, which then enter the nucleus and regulate the transcription of genes related to cell proliferation, cell cycle arrest, wound healing, immunosuppression, and tumorigenesis. Mutations in this gene have been associated with Marfan Syndrome, Loeys-Deitz Aortic Aneurysm Syndrome, and the development of various types of tumors. Alternatively spliced transcript variants encoding

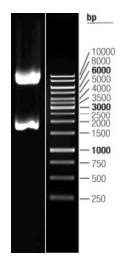
different isoforms have been characterized. [provided by RefSeq, Aug 2017]



Product images:



Circular map for RC219855L4



Double digestion of RC219855L4 using Sgfl and Rsrll $\,$