

Product datasheet for RC203786L2

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OriGene Technologies, Inc.

OLFM2 (NM_058164) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: OLFM2 (NM 058164) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: OLFM2

Synonyms: NOE2; NOELIN2; NOELIN2_V1; OlfC

Mammalian Cell None

Selection:

Vector:pLenti-C-mGFP (PS100071)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203786).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_058164

ORF Size: 1362 bp



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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 058164.1</u>

 RefSeq Size:
 1899 bp

 RefSeq ORF:
 1365 bp

 Locus ID:
 93145

 UniProt ID:
 095897

 Cytogenetics:
 19p13.2

Domains: OLF

Protein Families: Druggable Genome, Secreted Protein

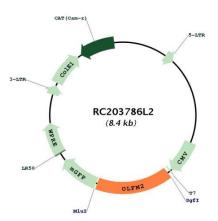
MW: 51.4 kDa

Gene Summary: Involved in transforming growth factor beta (TGF-beta)-induced smooth muscle

differentiation. TGF-beta induces expression and translocation of OLFM2 to the nucleus where it binds to SRF, causing its dissociation from the transcriptional repressor HEY2/HERP1 and facilitating binding of SRF to target genes (PubMed:25298399). Plays a role in AMPAR complex organization (By similarity). Is a regulator of vascular smooth-muscle cell (SMC) phenotypic switching, that acts by promoting RUNX2 and inhibiting MYOCD binding to SRF. SMC phenotypic switching is the process through which vascular SMCs undergo transition between a quiescent contractile phenotype and a proliferative synthetic phenotype in response to pathological stimuli. SMC phenotypic plasticity is essential for vascular development and remodeling (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC203786L2