

Product datasheet for RC210866L2

OriGene Technologies, Inc.

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SMURF 2 (SMURF2) (NM_022739) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: SMURF 2 (SMURF2) (NM_022739) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: SMURF 2

Mammalian Cell None

Selection: Vector:

pLenti-C-mGFP (PS100071)

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

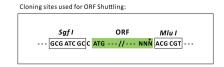
ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC210866).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_022739

ORF Size: 2244 bp

SMURF 2 (SMURF2) (NM_022739) Human Tagged Lenti ORF Clone - RC210866L2

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 022739.3</u>

 RefSeq Size:
 3866 bp

 RefSeq ORF:
 2247 bp

 Locus ID:
 64750

 UniProt ID:
 Q9HAU4

Cytogenetics: 17q23.3-q24.1 Domains: C2, HECT, WW

Protein Families: Adult stem cells, Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

Protein Pathways: Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell

adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, TGF-beta signaling pathway, Type I diabetes mellitus, Ubiquitin mediated proteolysis, Viral myocarditis

MW: 86.2 kDa

Gene Summary: E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme

in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Interacts with SMAD1 and SMAD7 in order to trigger their ubiquitination and proteasome-

dependent degradation. In addition, interaction with SMAD7 activates autocatalytic

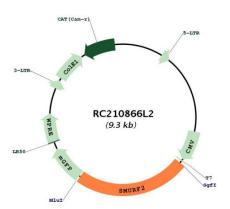
degradation, which is prevented by interaction with SCYE1. Forms a stable complex with the TGF-beta receptor-mediated phosphorylated SMAD2 and SMAD3. In this way, SMAD2 may recruit substrates, such as SNON, for ubiquitin-mediated degradation. Enhances the

inhibitory activity of SMAD7 and reduces the transcriptional activity of SMAD2. Coexpression of SMURF2 with SMAD1 results in considerable decrease in steady-state level of SMAD1

protein and a smaller decrease of SMAD2 level.[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC210866L2