

Product datasheet for RC208749L2

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OriGene Technologies, Inc.

SMAD3 (NM_005902) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: SMAD3 (NM_005902) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: SMAD3

Synonyms: HSPC193; HsT17436; JV15-2; LDS1C; LDS3; MADH3

Mammalian Cell None

Selection:

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

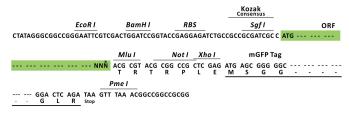
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC208749).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_005902

ORF Size: 1275 bp



SMAD3 (NM_005902) Human Tagged Lenti ORF Clone - RC208749L2

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 005902.3</u>

RefSeq Size: 6256 bp
RefSeq ORF: 1278 bp
Locus ID: 4088
UniProt ID: P84022

Cytogenetics: 15q22.33

Domains: DWB, DWA, MH1

Protein Families: Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Stem

cell relevant signaling - JAK/STAT signaling pathway, Stem cell relevant signaling - TGFb/BMP

signaling pathway, Transcription Factors

Protein Pathways: Adherens junction, Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Pancreatic cancer,

Pathways in cancer, TGF-beta signaling pathway, Wnt signaling pathway

MW: 47.9 kDa

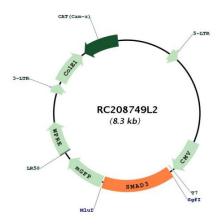
Gene Summary: The SMAD family of proteins are a group of intracellular signal transducer proteins similar to

the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. The SMAD3 protein functions in the transforming growth factor-beta signaling pathway, and transmits signals from the cell surface to the nucleus, regulating gene activity and cell proliferation. It also functions as a tumor suppressor. Mutations in this gene are associated with aneurysms-osteoarthritis syndrome and Loeys-Dietz Syndrome 3.

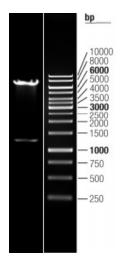
[provided by RefSeq, Nov 2019]



Product images:



Circular map for RC208749L2



Double digestion of RC208749L2 using Sgfl and Mlul $\,$