

Product datasheet for MR226539

Rspo1 (NM_138683) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Rspo1 (NM_138683) Mouse Tagged ORF Clone

Tag: Myc-DDK

Symbol: Rspo1

Synonyms: R-spondin; Rspondin

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >MR226539 representing NM_138683

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence:

>MR226539 representing NM_138683 Red=Cloning site Green=Tags(s)

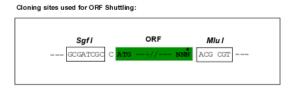
MRLGLCVVALVLSWTHIAVGSRGIKGKRQRRISAEGSQACAKGCELCSEVNGCLKCSPKLFILLERNDIR QVGVCLPSCPPGYFDARNPDMNKCIKCKIEHCEACFSHNFCTKCQEGLYLHKGRCYPACPEGSTAANSTM ECGSPAQCEMSEWSPWGPCSKKRKLCGFRKGSEERTRRVLHAPGGDHTTCSDTKETRKCTVRRTPCPEGQ KRRKGGQGRRENANRHPARKNSKEPGSNSRRHKGQQQPQPGTTGPLTSVGPTWAQ

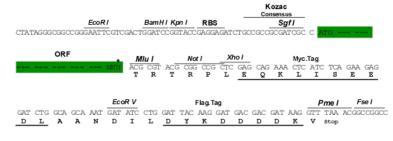
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_138683

ORF Size: 795 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 customport@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.



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 138683.2</u>, <u>NP 619624.2</u>

 RefSeq Size:
 1834 bp

 RefSeq ORF:
 798 bp

 Locus ID:
 192199

 UniProt ID:
 Q9Z132

 Cytogenetics:
 4 D2.2

 MW:
 29.7 kDa

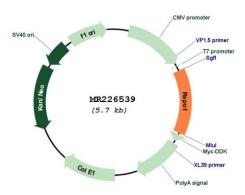
Gene Summary: Activator of the canonical Wnt signaling pathway by acting as a ligand for LGR4-6 receptors.

Upon binding to LGR4-6 (LGR4, LGR5 or LGR6), LGR4-6 associate with phosphorylated LRP6 and frizzled receptors that are activated by extracellular Wnt receptors, triggering the canonical Wnt signaling pathway to increase expression of target genes (PubMed:21693646). Also regulates the canonical Wnt/beta-catenin-dependent pathway and non-canonical Wnt signaling by acting as an inhibitor of ZNRF3, an important regulator of the Wnt signaling pathway. Acts as a ligand for frizzled FZD8 and LRP6. May negatively regulate the TGF-beta pathway. Has a essential roles in ovary determination (By similarity). Regulates Wnt signaling by antagonizing DKK1/KREM1-mediated internalization of LRP6 through an interaction with

KREM1 (By similarity).[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for MR226539