

## Product datasheet for MC211357

### Rspo3 (NM\_028351) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rspo3 (NM\_028351) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Rspo3  
**Synonyms:** 2810459H04Rik; AW742308; Cristin1; Thsd2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Fully Sequenced ORF:** >MC211357 representing NM\_028351  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCACTTGGCAGTATTCTTGTTTTTTATCATTTTGAACCTTATGGAATACATTGGCAGCCAAAACG  
 CCTCCCGAGGAAGGCGCCAGCGAAGAATGCATCCTAATGTCAGTCAAGGCTGCCAAGGAGGCTGTGCAAC  
 GTGTTCAAGATTACAATGGCTGTTTGTCAATGTAAGCCAGACTGTTTTTGTCTGGAAAGGATTGGCATG  
 AAGCAGATAGGAGTGTGCTCTCTTCGTGTCCAAGTGGATATTACGGAACCGATATCCAGATATAAATA  
 AATGTACAAAATGCAAAGTTGACTGTGATACCTGTTTCAACAAAATTTCTGCACAAAGTGTAAAAGTGG  
 ATTTTACTTACACCTTGGAAAGTGCCTTGACAGTTGCCAGAAAGGTTAGAAGCCAAACAATCATACTATG  
 GAATGTGTCAGTATTGTACACTGTGAGGCCAGTGAATGGAGTCCATGGAGTCCATGTATGAAGAAAGGAA  
 AAACATGTGGCTTCAAAGGGGGACTGAAACACGGGTCGAGATATACTACAGCATCCTTCAGCCAAAGGG  
 TAACCTGTGCCCCCAACCAGCGAGACAAGAACTTGTATAGTACAAAGAAAGAGTGTCAAAGGGAGAG  
 CGAGGAAAAAGGGAAGAGAGAGAAAACGAAAAAACTGAATAAAGAAAGAAAGAAAGAAACAAGCTCCT  
 CCTCTGACAGCAAAGTTGGAGTCCAGCATTGAGACCCAGACCAGCAGGAAAAACAAAGAGAGGCCAGCA  
 GCAGCAGAAGAGAAGAGCCCGAGACAAGCAACAGAAATCGGTATCAGTCAGCACTGTACAC**TAG**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_028351  
**Insert Size:** 834 bp



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**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 [custsupport@origene.com](mailto:custsupport@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](#)

**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:** [NM\\_028351.3](#), [NP\\_082627.3](#)

**RefSeq Size:** 2411 bp

**RefSeq ORF:** 834 bp

**Locus ID:** 72780

**UniProt ID:** [Q2TJ95](#)

**Cytogenetics:** 10 A4

**Gene Summary:**

Activator of the canonical Wnt signaling pathway by acting as a ligand for LGR4-6 receptors, which acts as a key regulator of angiogenesis (PubMed:16543246, PubMed:21693646, PubMed:26766444). 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. 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 (PubMed:16543246, PubMed:21693646). Acts as a key regulator of angiogenesis by controlling vascular stability and pruning: acts by activating the non-canonical Wnt signaling pathway in endothelial cells (PubMed:26766444, PubMed:16543246, PubMed:21693646). Can also amplify Wnt signaling pathway independently of LGR4-6 receptors, possibly by acting as a direct antagonistic ligand to RNF43 and ZNRF3 (By similarity).[UniProtKB/Swiss-Prot Function]