

Product datasheet for **MC213071**

Rspo2 (NM_172815) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rspo2 (NM_172815) Mouse Untagged Clone
Tag: Tag Free
Symbol: Rspo2
Synonyms: 2610028F08Rik; AA673245; D430027K22; ftIs
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >MC213071 representing NM_172815
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCGTTTTTGCCTCTTCTCATTGCCCCTCATCTGAACTGTATGGATTACAGCCAGTGCCAAGGCA
ACCGATGGAGACGCAATAAGCGAGCTAGTTATGTATCAAATCCCATTTGCAAGGGTTGTTTGTCTTGTTTC
GAAGGACAATGGTTGCAGCCGATGTCAACAGAAGTTGTTCTTTTTCTTGAAGAGAAGGAATGCGTCAG
TATGGAGAGTGCCTGCATTCCTGCCATCAGGGTATTATGGACACCGAGCCCAGATATGAACAGATGTG
CACGATGCAGAATAGAAAAGTGTATTCTTGCTTTAGCAAAGACTTTTGTACGAAGTGCAAAGTAGGCTT
TTATTTGCATAGAGGCCGCTGCTTTGATGAATGTCCAGATGGTTTTGCACCGTTAGATGAGACTATGGAA
TGTGTAGAAGTTGTGAAGTTGGTCATTGGAGCGAATGGGGAACGTGTAGCAGAAAACAACCGCACGTGTG
GATTTAAATGGGGTCTGGAAACCAGAACCGGCAGATTGTTAAAAAGCCAGCAAAAGACACAATACCATG
TCCGACCATGCGGAGTCCAGGAGATGCAAGATGGCCATGAGGCACTGTCCAGGAGGAAAGAGAACCA
AAGGCAAAAGAGAAGAGAAAACAAGAAGAAGGCGGAAGCTGATTGAGAGAGCCCAAGAGCAGCACAGCG
TCTTCTCGCTACAGACAGAGTGAACCA**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAAAAGTCTCAGAAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1886_g07.zip
Restriction Sites: SgfI-MluI
ACCN: NM_172815
Insert Size: 732 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 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_172815.3](#), [NP_766403.1](#)

RefSeq Size: 3340 bp

RefSeq ORF: 732 bp

Locus ID: 239405

UniProt ID: [Q8BFU0](#)

Cytogenetics: 15 16.73 cM

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. 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. Probably also acts as a ligand for frizzled and LRP receptors (PubMed:21693646). During embryonic development, plays a crucial role in limb specification, amplifying the Wnt signaling pathway independently of LGR4-6 receptors, possibly by acting as a direct antagonistic ligand to RNF43 and ZNRF3, hence governing the number of limbs an embryo should form (By similarity). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) uses an alternate in-frame splice site in the 5' coding region compared to variant 1. It encodes isoform 2 which has a shorter N-terminus compared to isoform 1. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.