

Product datasheet for **MG216699**

Rspo2 (NM_172815) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rspo2 (NM_172815) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Rspo2
Synonyms:	2610028F08Rik; AA673245; D430027K22; ftIs
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG216699 representing NM_172815 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGTTTTGCCTCTTCTCATTGCCCCTCATCATTCTGAACTGTATGGATTACAGCCAGTGCCAAGGCA
ACCGATGGAGACGCAATAAGCGAGCTAGTTATGTATCAAATCCCATTTGCAAGGGTTGTTTGTCTTGTTCC
GAAGGACAATGGTTGCAGCCGATGTCAACAGAAGTTGTTCTTTTTCCTTGAAGAGAAGGAATGCGTCAG
TATGGAGAGTGCCTGCATTCTGCCATCAGGGTATTATGGACACCGAGCCCAGATATGAACAGATGTG
CACGATGCAGAATAGAAAAGTGTATTCTTGTCTTAGCAAAGACTTTTGTACGAAGTGCAAAGTAGGCTT
TTATTTGCATAGAGGCCGCTGCTTTGATGAATGTCCAGATGGTTTTGCACCGTTAGATGAGACTATGGAA
TGTGTAGAAGTTGTGAAGTTGGTCATTGGAGCGAATGGGGAACGTGTAGCAGAAACAACCGCACGTGTG
GATTTAAATGGGGTCTGGAAACCAGAACACGGCAGATTGTTAAAAAGCCAGCAAAGACACAATACCATG
TCCGACCATGCGGAGTCCAGGAGATGCAAGATGGCCATGAGGCACTGTCCAGGAGGAAAGAGAACCA
AAGGCAAAGAGAAGAGAAACAAGAAGAAGAGCGGAAGCTGATTGAGAGAGCCCAAGAGCAGCACAGCG
TCTTCTCGCTACAGACAGAGTGAACCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG216699 representing NM_172815
 Red=Cloning site Green=Tags(s)

MRFCLFSFALIILNCMDYSQCQGNRWRNRKRASYVSNPICKGCLSCSKDNGCSRCQKLFLLRREGMRQ
 YGELHSCPSGYGHRAPDMNRCARCRIENCDSFC SKDFCTKCKVGFYLHRGRCFDECPDGFAPLDETME
 CVEGCEVGHWSEWGTCSRNNRTCGFKWGLETRTRQIVKKPAKDTIPCPTIAESRRCKMAMRHCPCGGKRT
 KAKEKRNNKKRRKLIERAQEQHSVFLATDRVNQ

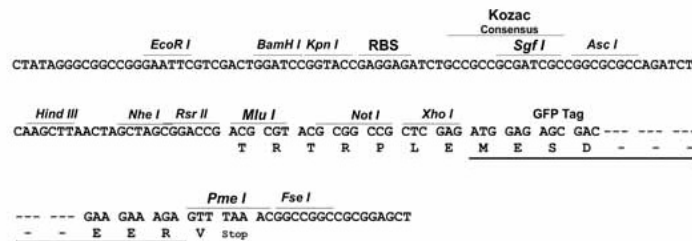
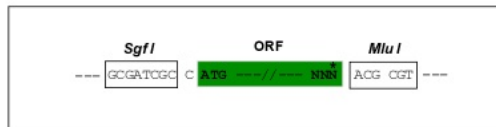
TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1174_b07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_172815

ORF Size: 729 bp

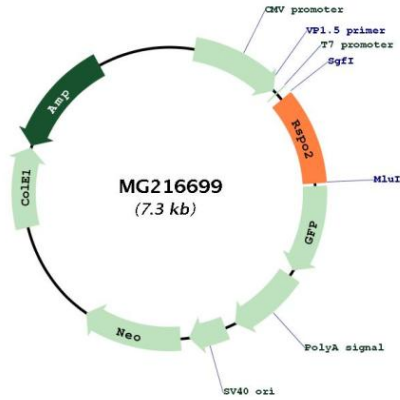
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at 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](#)

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:	<ol style="list-style-type: none">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]

Product images:



Circular map for MG216699