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Product datasheet for MC222799

Lgr4 (NM_172671) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lgr4 (NM_172671) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Lgr4
Synonyms:	9130225G07; A330106J01Rik; A930009A08Rik; Gpr48
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>NM_172671.2
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGGGCCCGCTGCGGCTGCTCTGCTTCTTCGCCCTGGGGCTGCTCGGCTCGGCCGGGCCCAGCGGCG
CGGCGCCACCTCTCTGCGCTGCGCCCTGCAGCTGCGACGGCGACCGTCGGGTGGACTGCTCCGGGAAGGG
GTTGACGGCGGTACCGGAGGGGCTCAGCGCCTTCACCCAAGCACTGGATATCAGTATGAACAATATCACT
CAGTTACCAGAAGATGCATTTAAGAATTTTCCTTTTCTAGAGGAGCTACAACTGGCTGGTAACGACCTTT
CTTTTATCCACCCAAAAGCCTTGTCTGGGTTGAAAGAACTCAAAGTCCTAACCCTCCAGAACAATCAGTT
GAAAACAGTACCCAGTGAAGCCATTCGTGGACTGAGTGCTTTGCAGTCTCTACGCTTAGATGCCAACCAT
ATTACCTCAGTCCCGGAGGACAGTTTTGAAGGGCTCGTTCAGTTGCGGCATCTGTGGCTGGATGACAACA
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AATAAAATTAAAAGCCTCAGTCAACACTGTTTTGATGGACTAGATAACCTGGAAACCCTGGACTTGAATT
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TAGAAACCTGATTCGTGAAATTCACAGTGGAGCTTTTGCGAAGCTTGGGACAATTACTAACCTGGATGTG
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TTATCAGTGTTGTGCATTTTGGGGGTGTGACTCTTATGCAAATTTAAACACAGAAGATAACAGCCCCCAA
GACCACAGTGTGACAAAAGAGAAAGGTGCTACAGATGCAGCAAATGCCACCAGCACTGCTGAAAGTGAAG
AACATAGCCAAATAATCATCCATTGTACACCTTCAACAGGTGCTTTTAAGCCCTGTGAATATTTACTGGG
AAGCTGGATGATTCGCCTTACAGTGTGGTTCATTTTCCTGGTCGCCTTGCTTTTCAACCTGCTTGTCATT
TTAACAGTGTTTGCGTCTTGTTCATCACTGCCTGCCTCCAAGCTCTTCATAGGCTTGATTTCTGTGTCTA
ACTTACTCATGGGCATCTATACTGGCATCCTTACTTTTCTTGATGCTGTGTCCTGGGGCCGATTTGCTGA
ATTTGGCATTTGGTGGGAAACTGGCAGCGGCTGCAAGGTAGCTGGGTCTCTGGCAGTCTTCTCCTCAGAG
AGCGCCGTATTCCTGTTAACCCTGGCAGCCGTGGAAAGAAGCGTTTTTGCAAAGGATGTAATGAAAAATG
GGAAAAGCAGTCACCTCCGACAGTTCCAGGTGGCTGCCCTCGTAGCTTTGCTGGGTGCTGCAATAGCAGG
CTGCTTCCCCCTTTTTCACGGAGGGCAATATTCTGCATCACCCTTGTGCTTGCCATTTCCTACAGGAGAG
ACACCATCATTAGGATTCACTGTGACCCTAGTGCTATTAAACTCACTAGCATTTTTATTGATGGCCATTA
TCTACACTAAACTCTACTGCAACTTAGAGAAAGAAGACCCGTCAGAAAACTCCCAGTCTAGCATGATTAA
GCACGTTGCTTGGCTCATCTTCACAAACTGCATCTTCTTCTGCCCTGTTGCATTTTTCTCATTCGCACCA
TTGATCACGGCAATCTCCATCAGCCCCGAGATAATGAAGTCTGTTACGCTGATATTCTTCCCGCTGCCTG
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GCGTGTCACCAGGAAACACGGATCAGTCTCAGTCTCCATCAGCAGCCAAGGCGGTTGTGGGGAACAGGAT
TTCTACTACGACTGTGGCATGTATTCCCACTTGCAGGGTAACCTGACTGTCTGTGACTGCTGTGAGTCAT
TTCTTCTGACAAAACCAGTATCGTGCAAACACTTAATAAAATCGCACAGTTGTCCTGTATTGACAGTGGC
CTCTTGCCAGAGGCCAGAGGCCTACTGGTCTGATTGTGGCACACAGTCGGCCCATTCTGACTATGCAGAT
GAAGAGGATTCCTTTGTCTCGGACAGCTCTGACCAGGTGCAGGCCTGTGGACGAGCCTGCTTCTACCAGA
GTCGCGGATTCCCTCTGGTGCGCTATGCTTATAATCTACCGAGAGTCAGAGACTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1394_e07.zip

Restriction Sites:	SgfI-MluI
ACCN:	NM_172671
Insert Size:	2856 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_172671.2, NP_766259.2
RefSeq Size:	5066 bp
RefSeq ORF:	2856 bp
Locus ID:	107515
UniProt ID:	A2ARI4
Cytogenetics:	2 E3

Gene Summary: Receptor for R-spondins that potentiates the canonical Wnt signaling pathway and is involved in the formation of various organs. Upon binding to R-spondins (RSPO1, RSPO2, RSPO3 or RSPO4), associates 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. In contrast to classical G-protein coupled receptors, does not activate heterotrimeric G-proteins to transduce the signal. Its function as activator of the Wnt signaling pathway is required for the development of various organs, including liver, kidney, intestine, bone, reproductive tract and eye. May also act as a receptor for norrin (NDP), such results however require additional confirmation in vivo. Required during spermatogenesis to activate the Wnt signaling pathway in peritubular myoid cells. Required for the maintenance of intestinal stem cells and Paneth cell differentiation in postnatal intestinal crypts. Acts as a regulator of bone formation and remodeling. Involved in kidney development; required for maintaining the ureteric bud in an undifferentiated state. Involved in the development of the anterior segment of the eye. Required during erythropoiesis. Also acts as a negative regulator of innate immunity by inhibiting TLR2/TLR4 associated pattern-recognition and proinflammatory cytokine production. Plays an important role in regulating the circadian rhythms of plasma lipids, partially through regulating the rhythmic expression of MTTP (PubMed:24353284).[UniProtKB/Swiss-Prot Function]