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Product datasheet for MC203730

Lrp5 (NM_008513) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lrp5 (NM_008513) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Lrp5
Synonyms:	BMND1; HBM; LR3; LRP7; mKIAA4142; OPPG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>MC203730 representing NM_008513.
Blue=ORF Red=Cloning site Green=Tag(s)

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCG
CGCCAGATCTCAAGCTTAACTAGCTAGCGGACCGAC
ATGGAAACGGCGCCGACCCGGGCCCCTCCGCCGCCGCCGCCGCCGCTGCTGCTGCTGGTGCTGTACTGC
AGCTTGGTCCCCGCCGCGGCCTCACCGCTCCTGTTGTTTGCCAACCGCCGGGATGTGCGGCTAGTGGAT
GCCGGCGGAGTGAAGCTGGAGTCCACCATTGTGGCCAGTGGCCTGGAGGATGCAGCTGCTGTAGACTTC
CAGTTCTCCAAGGGTGCTGTGTACTGGACAGATGTGAGCGAGGAGGCCATCAAACAGACCTACCTGAAC
CAGACTGGAGCTGCTGCACAGAACATTGTCATCTCGGGCCTCGTGTCACCTGATGGCCTGGCCTGTGAC
TGGGTTGGCAAGAAGCTGTACTGGACGGACTCCGAGACCAACCGCATTGAGGTTGCCAACCTCAATGGG
ACGTCCCGTAAGGTTCTCTTCTGGCAGGACCTGGACCAGCCAAGGGCCATTGCCCTGGATCCTGCACAT
GGGTACATGTACTGGACTGACTGGGGGGAAGCACCCCGGATCGAGCGGGCAGGGATGGATGGCAGTACC
CGGAAGATCATTGTAGACTCCGACATTTACTGGCCCAATGGGCTGACCATCGACCTGGAGGAACAGAAG
CTGTACTGGGCCGATGCCAAGCTCAGCTTCATCCACCGTGCCAACCTGGACGGCTCCTTCCGGCAGAAG
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GCTCGGAGGACAGACCTGAGGAGGATCTCTCTGGACACCCCTGACTTCACAGACATAGTGCTGCAGGTG
GGCGACATCCGGCATGCCATTGCCATTGACTACGATCCCCTGGAGGGCTACGTGTACTGGACCGACGAT
GAGGTGCGGGCTATCCGCAGGGCGTACCTAGATGGCTCAGGTGCGCAGACACTTGTGAACACTGAGATC
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CGAGCCATTGTGTTGCACCCTGTGATGGGCCTCATGTACTGGACAGACTGGGGGGAGAACCCCAAAATC
GAATGCGCCAACCTAGATGGGAGAGATCGGCATGTCCTGGTGAACACCTCCCTTGGGTGGCCCAACGGA

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CTGGCCCTGGACCTGCAGGAGGGCAAGCTGTACTGGGGGGATGCCAAAACTGATAAAATCGAGGTGATC
AACATAGATGGGACAAAGCGGAAGACCCTGCTTGAGGACAAGCTCCCACATATTTTTGGGTTCACACTG
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TTTACCAACATGCAGGACCATGCTGCCAAGATCGAGCGAGCCTCCCTGGATGGCACAGAGCGGGAGGTC
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GCCAACATCGTACAGCCAGTAGGTCTGACAGTGCTGGGCAGGCACCTCTACTGGATCGACCGCCAGCAG
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AATGGCGGCTGCTCCCACATCTGTATCGCCAAGGGTGATGGAACACCGCGCTGCTCGTGCCCTGTCCAC
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GCCCACAGCAGTGCCATTGGGCCCGTCATTGGTATCATCCTCTCCCTCTTCGTCATGGGCGGGGTCTAC
TTTGTCTGCCAGCGTGTGATGTGCCAGCGCTACACAGGGGCCAGTGGGCCCTTTCCCCACGAGTATGTT
GGTGGAGCCCCTCATGTGCCTCTCAACTTCATAGCCCCAGGTGGCTCACAGCACGGTCCCTTCCCAGGC
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GACCGGAATCACGTCACTGGGGCCTCATCCAGCAGCTCGTCCAGCACAAAGGCCACACTATATCCGCCG
ATCCTGAACCCACCCCCGTCCCCGGCCACAGACCCCTCTCTCTACAACGTGGACGTGTTTTATTCTTCA
GGCATCCCGGCCACCGCTAGACCATACAGGCCCTACGTCATTCGAGGTATGGCACCCCCAACAACACCG
TGCAGCACAGATGTGTGTGACAGTGACTACAGCACCAGTCGCTGGAAGAGCAGCAAATACTACCTGGAC
TTGAATTCGGACTCAGACCCCTACCCCCCCCCGCCCACCCCCCACAGCCAGTACCTATCTGCAGAGGAC
AGCTGCCCACCCTCACCAGGCACTGAGAGGAGTTACTGCCACCTCTTCCCGCCCCCACCGTCCCCCTGC
ACGGACTCGTCCTGA
ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAG
GATGACGACGATAAGGTTTAAACGGCCGGCCGCGGT

Chromatograms:	https://cdn.origene.com/chromatograms/ja3459_e01.zip
Restriction Sites:	RsrII-NotI
ACCN:	NM_008513
Insert Size:	4845 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:	BC011374
RefSeq Size:	5172 bp
RefSeq ORF:	4845 bp
Locus ID:	16973
UniProt ID:	Q91VN0
Cytogenetics:	19 A
MW:	178.9 kDa

Gene Summary: Acts as a coreceptor with members of the frizzled family of seven-transmembrane spanning receptors to transduce signal by Wnt proteins. Activates the canonical Wnt signaling pathway that controls cell fate determination and self-renewal during embryonic development and adult tissue regeneration (PubMed:11956231). In particular, may play an important role in the development of the posterior patterning of the epiblast during gastrulation (PubMed:15142971). During bone development, regulates osteoblast proliferation and differentiation thus determining bone mass (PubMed:11956231). Mechanistically, the formation of the signaling complex between Wnt ligand, frizzled receptor and LRP5 coreceptor promotes the recruitment of AXIN1 to LRP5, stabilizing beta-catenin/CTNNB1 and activating TCF/LEF-mediated transcriptional programs (By similarity). Acts as a coreceptor for non-Wnt proteins, such as norrin/NDP. Binding of norrin/NDP to frizzled 4/FZD4-LRP5 receptor complex triggers beta-catenin/CTNNB1-dependent signaling known to be required for retinal vascular development (By similarity). Plays a role in controlling postnatal vascular regression in retina via macrophage-induced endothelial cell apoptosis (PubMed:11956231). [UniProtKB/Swiss-Prot Function]