

## Product datasheet for **SC315373**

### LRP6 (NM\_002336) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** LRP6 (NM\_002336) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** LRP6  
**Synonyms:** ADCAD2; STHAG7  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL4  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_002336 edited  
CTGGGAAGTATGAGCGTGCAGCCCTGCCGCTGCGGCGGCCCGCCCGGCTCCTCGCCTCCC  
CCACTTCTGGCCACCCCTCGCCGGTGAGAGAAGAGAACGCGAGAAGGGAAGATGGGGGCC  
GTCTGAGGAGCCTCCTGGCCTGCAGCTTCTGTGTGCTCCTGAGAGCGGCCCTTTGTG  
CTTTATGCAAACAGACGGGACTTGCGATTGGTTGATGCTACAAATGGCAAAGAGAATGCT  
ACGATTGTAGTTGGAGGCTTGGAGGATGCAGCTGCGGTGGACTTTGTGTTTAGTCATGGC  
TTGATATACTGGAGTGATGTCAGCGAAGAAGCCATTAACGAACAGAATTTAACAAA  
GAGAGTGTGAGAATGTTGTTGTTCTGGATTATTGTCCCGGATGGGCTGGCATGTGAT  
TGGCTTGGAGAAAAATTGACTGGACAGATTCTGAACTAATCGGATTGAAGTTTCTAAT  
TTAGATGGATCTTACGAAAAGTTTTATTTGGCAAGAGTTGGATCAACCCAGAGCTATT  
GCCTTAGATCCTTCAAGTGGGTTTCACTGACTGGACAGACTGGGGAGAAGTGCCAAAGATA  
GAACGTGCTGGAATGGATGGTTCAAGTCGCTTCAATATAATAACAGTGAATTTACTGG  
CCAAATGGACTGACTTTGGATTATGAAGAACAAGCTTTATTGGGCAGATGCAAAA  
AATTTTATCCACAAATCAATCTGGATGGAACAAATCGGCAGGCAGTGGTTAAAGTTCC  
CTTCCACATCCTTTTGCCTTGACGTTATTTGAGGACATATTGACTGGACTGACTGGAGC  
ACACACTCCATTTTGGCTTGCAACAAGTATACTGGTGAGGGTCTGCGTGAAATCCATTCT  
GACATCTTCTCTCCATGGATATACATGCCTTCAGCCAACAGAGGCAGCCAAATGCCACA  
AATCCATGTGGAATTGACAATGGGGTTGTTCCATTTGTGTTTGTGATGTCTCCAGTCAAG  
CCTTTTTATCAGTGTGCTTGGCCACTGGGGTCAAACCTCTGGAGAATGGAAAACTGC  
AAAGATGGTGCCACAGAATTATTGCTTTTAGCTCGAAGGACAGACTTGAGACGCATTTCT  
TTGGATACACCAGATTTTACAGACATTGTTCTGCAGTTAGAAGACATCCGTCATGCCATT  
GCCATAGATTACGATCCTGTGGAAGGCTACATCTACTGGACTGATGATGAAGTGAGGGCC  
ATACGCCGTTCAATTTATAGATGGATCTGGCAGTCAGTTTGTGGTCACTGCTCAAATGGC  
CATCCTGATGGTATTGCTGTGGACTGGGTTGCACGAAATCTTTATTGGACAGACTGGC  
ACTGATCGAATAGAAGTGACAAGGCTCAATGGGACCATGAGGAAGATCTTGATTTAGAG  
GACTTAGAGGAACCCCGGCTATTGTGTTAGATCCCATGGTTGGGTACATGTATTGGACT  
GACTGGGAGAAATCCGAAAATTGAGCGAGCAGCTCTGGATGGTTCTGACCGTGTAGTA



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TTGGTTAACACTTCTCTTGGTTGGCCAAATGGTTTAGCCTTGGATTATGATGAAGGCAAA  
 ATATACTGGGGAGATGCCAAAACAGACAAGATTGAGGTTATGAATACTGATGGCACTGGG  
 AGACGAGTACTAGTGGAAGACAAAATTCCTCACATATTTGGATTTACTTTGTTGGGTGAC  
 TATGTTTACTGGACTGACTGGCAGAGGCGTAGCATTGAAAAGATTATAAACGAAGTGCA  
 GAGAGGGAAGTGATCATAGATCAGCTGCCTGACCTCATGGGCCTAAAGGCTACAAATGTT  
 CATCGAGTGATTGGTTCCAACCCCTGTGCTGAGGAAAACGGGGGATGTAGCCATCTGCT  
 CTCTATAGACCTCAGGGCCTTCGCTGTGCTTGGCCTATTGGCTTGAACCTCATCAGTGC  
 ATGAAGACCTGCATTGTCCCAGAGGCTTTCCTTTTGTTCACGGAGAGCAGATATCAGA  
 CGAATTTCTCTGAAAACAAAATAATAATGTGGCTATTCACACTACTGGTGTCAAAGAA  
 GCTTCTGCTTTGGATTTTATGATGTGACAGACAACCGAATTTATTGGACTGATATATCACTC  
 AAGACCATCAGCAGAGCCTTTATGAATGGCAGTGCCTGGAACATGTGGTAGAATTCGGC  
 TTAGATTATCCAGAAGGCATGGCAGTAGACTGGCTTGGGAAGAACTTGTACTGGGCAGAC  
 ACAGGAACGAATCGAATTGAGGTGTCAAAGTTGGATGGGCAGCACCGACAAGTTTGGTG  
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 TCACGACAAAACATGATCCGAAAGGCACAAGAAGATGGCAGCCAGGGCTTACTGTGGT  
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 GATGGGAGATCAGTTGGAGTGGTGTGCTGAAAGGCGAGCAGGACAGACCTCGAGCCATTGTG  
 GTAACCAGAGAAAGGGTATATGTATTTACCAATCTTCAGGAAAGGTCTCCTAAAATT  
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 CCAATTGCTTTAGCCCTTGATAGCAGGCTGGGCAAGCTCTTTTGGCTGATTGAGATCTC  
 CGGCGAATTGAAAGCAGTGATCTCTCAGGTGCTAACCGGATAGTATTAGAAGACTCCAAT  
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 CAGCAATGATTGAAAAAATTGACATGACAGGTCGAGAGGGTAGAACCAAGTCCAAGCT  
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 GGTACTACAAGGTGTTCTTCCCCATGCACCTGGTCTACTTCAAGATGAGCTATCATGT  
 GGAGAACCTCCAACATGTTCTCCTCAGCAGTTTACTTGTTCACGGGGGAAATTGACTGT  
 ATCCCTGTGGCTTGGCGGTGCGATGGGTTTACTGAATGTGAAGACCACAGTGATGAACTC  
 AATTGTCTGTATGCTCAGAGTCCAGTCCAGTGTGCCAGTGGGCAAGTATTGATGGT  
 GCCCTCCGATGCAATGGAGATGCAAACCTGCCAGGACAAATCAGATGAGAAGAACTGTGAA  
 GTGCTTTGTTAATTGATCAGTTCGCTGTGCCAATGGTCAAGTGCATTGGAAAGCACAAG  
 AAGTGTGATCATAATGTGGATTGCAGTGACAAGTCAAGTGAAGTGGATTGTTATCCGACT  
 GAAGAACCAGCACACAGGCCACCAATACAGTTGGTCTGTTATTGGCGTAATTGTCACC  
 ATTTTTGTGCTGGAAGTGTATACTTTATCTGCCAGAGGATGTTGTGTCACGTATGAAG  
 GGAGATGGGGAACTATGACTAATGACTATGTAGTTCATGGACCAGCTTCTGTGCCTCTT  
 GGTATGTGCCACACCAAGTCTTTGTGAGGATCTCTTCCAGGAATGTCTCGAGGTAAA  
 TCAATGATCAGCTCCCTCAGTATCATGGGGGAAGCAGTGGACCCCTATGACCAGGCC  
 CATGTTACAGGAGCATCATCAAGTAGTCTTCAAGCACCAAAAGGCACTTACTTCCCTGCA  
 ATTTTGAACCTCCACCATCCCCAGCCACAGAGCGATCACATTACACTATGGAATTTGGA  
 TATTCTTCAAACAGTCTTCCACTCATAGGTATACAGCTACAGGCCATATAGCTACCGG

CACTTTGCACCCCCACACACCCTGCAGCACAGATGTTTGTGACAGTACTATGCTCCT  
 AGTCGGAGAATGACCTCAGTGGCAACAGCCAAGGGCTATACCAGTGACTTGAACATGAT  
 TCAGAACCTGTGCCCCACCTCCACACCCGAAGCCAATACTTGTGACAGAGGAGAAC  
 TATGAAAGCTGCCACCTTCTCCATACACAGAGAGGAGCTATTCTCATCACCTCTACCCA  
 CCGCCACCCTCTCCCTGTACAGACTCCTCCTGAGGAGGGGCCCTCCTCTGACTGCCT  
 CCAACGTAAAAATGTAATATAAAATTTGGTTGAGATCTGGAGGGGGGAGGGAGCTATTA  
 GAGAAGGATGAGGCAGACCATGTACAGTAAAAATTATAAAATGGGGTAGGGAATACTGGA  
 GATATTTGTACAGAAGAAAAGGATATTTATATATTTTCTTAAACAGCAGATTTGCTGCT  
 TGTGCCATAAAAGTTTGTATAAAAAAATTTGTAATAAAAGTTTTATTTTGCAAACTAA  
 ATACACAAAGCATGCCTTAAACCCAGTGAAGCAACTGAGTACAAAGGAAACAGGAATAAT  
 AAAGGCATCACTGACCAGGAATATCTGGGCTTTATTGATACCAAAAAATAAAAAAAAAA  
 AAAAAA

**5' Read Nucleotide Sequence:**

>Reverse primer walk for NM\_002336 unedited  
 GCCTAGTTCATAAACTTTTCTAAACTCCTCTAATTAGAACTTCATCCGATTAGTTTCAG  
 AATCTGTCCAGTACAATTTTTCTCCAAGCCAATCACATGCCAGCCATCGGGGACAATA  
 ATCCAGAAACAACAACATTCTGCACACTCTCAGTTTTGTTAAATTCTGTTGTTTAAATG  
 CTTCTTCGCTGACATCACTCCAGTATATCAAGCCATGACTAAACACAAAGTCCACCCGAG  
 CTGCATCTCCAAGCCTCCAACATAATCGTAGCATTCTCTTGGCATTGTAGCATCAA  
 CCAATCGCAAGTCCCGTCTGTTTGCATAAAGCAACAAAGGGGCCGCTCTCAGGAGCACAC  
 AGAAGTGCAGGCCAGGAGGCTCCTCAGGACGGCCCCATCTTCCCTTCTCGGTTCTCT  
 TCTCTCACCGGCGAGGGGTGGCCAGAAGTGGGGGAGGCGAGGAGCCGGGGCGGCCCGC  
 AGCGGCAGGGCTGCACGCTCATACTTCCAGCCTCGTGCCGAATTCGCGGCCGCCCTATA  
 GTGAGTCTGATTACANAATTCTGACGGTCACTAAACGAGCTCTGCTTATATAGACCTCC  
 CACCGTACACGCCTACCGCCATTTGCGTCAACGGGGCGGGGTTATTACGACATTTTGA  
 AGTCCNGTTGATTTTGGTGCCAAACANAACCTCCATTGACGTCNAATGGGTGGAGACTTG  
 AAATCCCCGTGAGTCAAACCGCTATCCACGCCATTGGTGTACTGCCAAAACCGCATCAC  
 CATGGTAATAGCGATGACTAATACGTAGATGTACTGCCAGTAAGAAAAGTCCCGTAAGGT  
 CATGACTGGGCATAATGCCAGGCGGGCCATTTACCGTCTTTGACGTAAC

**3' Read Nucleotide Sequence:**

>Reverse primer walk for NM\_002336 unedited  
 GGATCTATTACTTTTTACCTGGTAGCATCANAGNAGGAGGCCCTCCTCAGNAGAGTCTG  
 TACAGGGAGAGGGTGGCGGTGGGTAGAGGTGATGAGAATAGTCCCTCTCTGTGTATGGAG  
 AAGGTGGGCAGCTTTCATAGTTCCTCTGCTGACAAGTATTGGCTTCGGGGTGTGGGAG  
 GTGGGGGCACAGGTTCTGAATCATAGTTCAAGTCACTGGTATAGCCCTTGGCTGTTGCCA  
 CTGAGGTCATTCTCCGACTAGGAGCATAGTCACTGTCAACAACATCTGTGCTGCAGGGTG  
 TGGTGGGGGTGCAAAGTGCCGGTAGCTATATGGCCTGTAGCTGTATGACCTATGAGTGG  
 AAGGACTGTTTGAAGAATATCCAAATTCATAGTGAATGTGATCGCTCTGTGGCTGGGG  
 ATGGTGGAGGGTTCAAATTCAGGGAAGTAAGTGCCCTTGGTGCTTGAAGAACTACTTG  
 ATGATGCTCCTGTAACATGGGCTCGGTCATAGGGGGTCCACTGCTTCCCCCATGATAC  
 TGAGGGAGCTGATCATTGATTTACCTCGAGACATTCTGGAAGAGATCCTGACAAAGAAC  
 TTGNGTGTGGCACATAACCAAGAGGCACAGAAGCTGGTCCATGAACTACATAGTCATTAG  
 TCATAGTTTCCCCTCTCCCTTCATACGTGGACACAACATCCTCTGNCAGATAAAGTATA  
 CAGTTCAGACCCAAAAATGGTGACAATTACGCCAATACCGAACCAACTGTATTGGTGGC  
 CTGTGGTCTTGGTTCTCCATCGGAAAACATCCCATTCAATCTGCCTGTCCCTGCAATCC  
 CCTAAGATCCCCCTCCTGGGGTTCATGCCCTGCCATTGGCACACGG

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_002336

**Insert Size:**

5300 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](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](#)

**OTI Annotation:** The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.

**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\\_002336.1](#), [NP\\_002327.1](#)

**RefSeq Size:** 5301 bp

**RefSeq ORF:** 4842 bp

**Locus ID:** 4040

**UniProt ID:** [O75581](#)

**Cytogenetics:** 12p13.2

**Domains:** ldl\_recept\_b, ldl\_recept\_a, EGF, EGF

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Wnt signaling pathway

**Gene Summary:**

This gene encodes a member of the low density lipoprotein (LDL) receptor gene family. LDL receptors are transmembrane cell surface proteins involved in receptor-mediated endocytosis of lipoprotein and protein ligands. The protein encoded by this gene functions as a receptor or, with Frizzled, a co-receptor for Wnt and thereby transmits the canonical Wnt/beta-catenin signaling cascade. Through its interaction with the Wnt/beta-catenin signaling cascade this gene plays a role in the regulation of cell differentiation, proliferation, and migration and the development of many cancer types. This protein undergoes gamma-secretase dependent RIP- (regulated intramembrane proteolysis) processing but the precise locations of the cleavage sites have not been determined.[provided by RefSeq, Dec 2009]