

## Product datasheet for SC307234

### RP1L1 (NM\_178857) Human Untagged Clone

#### Product data:

|                           |                                                                                                   |
|---------------------------|---------------------------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                                               |
| Product Name:             | RP1L1 (NM_178857) Human Untagged Clone                                                            |
| Tag:                      | Tag Free                                                                                          |
| Symbol:                   | RP1L1                                                                                             |
| Synonyms:                 | DCDC4B; OCMD; RP88                                                                                |
| Mammalian Cell Selection: | None                                                                                              |
| Vector:                   | <u>pCMV6-XL5</u>                                                                                  |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                                            |
| Fully Sequenced ORF:      | >OriGene ORF within SC307234 sequence for NM_178857 edited (data generated by NextGen Sequencing) |

ATGAACAGCACCCAGGAATGCCAGGCCCGAGCCACCGTGAGTGCTTCTGCCCTCT  
 GTGGCTCGCACCCCTCGGTACCAAGGTCACGCCAGCCAAGAAGATCACCTTCCTCAAG  
 CGAGGGGATCCACGGTTTGCTGGGTCCGCTGGCCGTTACACAGCGCGCTTTAAGACC  
 TTCAGCGCCCTCATGGACGAGCTCTCCAGCGCGTGCCTCTCTCCTTTGGGTGCGCTCT  
 GTCACCACACCCCGGGCCTGCATAGCCTCAGCGCCCTGGAGCAGCTGGAAGATGGAGGC  
 TGCTACCTCTGCTCTGATAAGAAGCCCCCAAGACCCCAAGTGGACCAGGCCGCCACAG  
 GAGAGAAACCCCACTGCTCAGCAGTTGCGGGATGTGAAGGCCAGCGTGAAGCCCCAGGC  
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 GACCCTCGCTCCAGCAGACAGTGGTTCTCAGTCACAGGAATACTAGGAACCTGGCCGCC  
 TTTCTCGGCAAAGCCTCAGATCTCCTGCGCTTTCTGTGAAGCAGTTGTACACGACCAGC  
 GGGAAAAAGGTGGACTCGCTGCAGGCCCTGCTGCACAGCCCTCTGTGCTGGTGTGTGCC  
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 TTATCTGGGCTGACTTCAAGAAACAAAACGGGAGCTGGGGGCCAAAGACCAAGCCGAGT  
 GTGATCCATTGCGGTCTCCGCCAGGCAGCAGCCACGGCTGCCAGAAAGGCCTGGTCTCT  
 AGCAACCCCGGTGGGCCCTGCTCCTGGCAGGCACCCTCAGGACAGCCAGCTCAGTCG  
 GGCCCGCTGGTGGCTGGCGATGACATGAAGAAGAAGTCCGCATGAATGAGGACGGCAGC  
 CTGTCCGTGGAGATGAAAGTCCGCTTCCACCTGGTGGCGAGGACACGCTCCTATGGTCC  
 CGGAGGATGGGCAGGGCCAGCGCCCTCACGGCAGCCAGTGGGGAAGACCCGTTCTGGGG  
 GAGGTAGACCCCTCTGCTGTGTGTGGGAGGGCTACCTTGGGGCTTCTCAGAGCCTGGG  
 GTGTGGGACCCCGCCCTGCAGGTGGGATGCAGGGAAGTCTTTGGCCAGGCGGGCAG  
 CCAGGGCCCAAGTATGAAATCTGGACGAATCCCCTGCATGCCTCCAGGGAGAGAGAGTG  
 GCAGCTCGGAAGAGGTGGGACTGGCCAGCACGTCCGCTGCAGTGGCCTGTGGGGCCAC  
 GGGACTGCCGGGAGGGAGAGATGCAGCCAGGACAGTGCCAGCCAGCCTCCAGCACCGGC  
 CTCCCCGAGGGCTCGGAGCCAGAGTCTCCTGCTGCCCCAGGACCCCGGAGGACGGGTG  
 GACAGTGCCAGCCCTCTGCCAGATAGGGGCTGAGCGGAAAGCTGGAGGGAGCCTGGGT


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GAGGACCCCGGCCTATGCATAGATGGAGCAGGGCTGGGCGGCCAGAGCAAGGCGGCCG  
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 TCTCATGAGGGATCCAGCGAATGGGGTGGGCGGCCAGGGCTGTCCAGGCAAGGCAAGG  
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 CTTTCATCTTTAAGGAGTGACGACCTGCAGGCAGAGACGCAAGGACAGGGTACCGAGCAG  
 GCCACGGGAGCGGCTGTGACAAGGGAGCCTCTGGTTCTGGGCTTTCTGCTCCTGGGAC  
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 CAGTTAGAGGAACTAAACAGAGAAGGGCTGCAAGAAGAGGGGTGCAAGTAGAGGAA  
 ACTAAAGAAACAGAAGGAGAAGGACAGCAAGAAGAAGAGGCGCAGTTAGAGGAAATTGAA  
 GAAACAGGAGGAGAAGGGCTGCAAGAAGAGGGGTGCAAGTAGAGGAAGTTAAAGAAGGG  
 CCAGAAGGAGGACTGCAAGGAGAGGCTCTTGAAGAGGGTCTCAAGAGGAAGGACTTCCA  
 GAAGAAGGAAGCGTCCACGGGACGAATTGTGAGAGGCCAGCTCTCCGGATGGGAAAGGC  
 TCCAGGAAGATGACCCAGTCCAGGAGGAGGAAGCAGGAAGAGCCTCTGCCTCTGCAGAG  
 CCGTGCCCCGACAGAGGGACAGAGGAACCCACAGAGCCCCCTAGTCATCTCAGCGAGACG  
 GACCCAAGTGCCAGCGAGAGTCAGAGTGCTCCAGCTTGAGCCTGGTTTGGAAAAGCCG  
 CCCGGAGCCACCATGATGGGCCAAGAGCACAGCAGGCCCAACCCACCCAGGGGGCTGCA  
 GAGAGGAGCTCTCGGTGGCCTGCAGCGCGGCTCTGGACTGCGACCCCATCTGGGTGTCC  
 GTGTTACTGAAGAAGACGGAGAAGGCCTTCTGGCCACCTTGCCAGTGCGGTGGCTGAG

CTCCGAGCACGCTGGGGCCTGCAGGACAATGATCTGCTGGACCAGATGGCGGCCGAGCTG  
CAGCAGGACGTGGCCCAACGCCTCCAGGACAGCACCAAGAGAGAGCTCCAGAAGCTCCAG  
GGCCGGGCGGGTAGGATGGTGTCTGGAGCCTCCAAGGGAGGCCCTCACCGGGGAGCTGCTC  
CTGCAGACCCAGCAGCGCAGACACCGTCTCCGGGGCCTGCGAAACCTCTCGGCCTTCTCT  
GAGCGGACCCTGGGCCTGGGGCCCTCTCCTTACCCTGGAGGACGAGCCAGCCCTCAGC  
ACAGCCCTGGGGAGCCAGCTGGGCGAGGAGGCGGAGGGGAGGAGTTCTGTCCCTGCGAG  
GCCTGCGTGAGGAAGAAAGTGAGCCCTATGTCCCCAAGGCCACAATGGGGCAACCAGA  
GGTCCCATCAAAGAGGCCCTTTGACCTGCAGCAGATTCTGCAGAGGAAGAGGGGAGAACAC  
ACTGATGGGGAGGCAGCAGAGGTGGTCCCTGGCAAGACCCACACGGACCCACAGGACACT  
AGGACTGTCCAGGGAGCTGAGGGAGGGCTGGGGCCGGGGCTGAGCCAGGGGCCTGGAGTG  
GACGAGGGTGAGGATGGCGAGGGGAGCCAGAGACTCAACAGAGACAAAGATCCCAAACCTC  
GGGGAGGCAGAGGGAGATGCAATGGCTCAGGAGAGAGAAGGGAAAACCCACAACAGTGAA  
ACCACTGCGGGCAGTGAGTTGGGGGAAGCTGAGCAGGAGGGAGAGGGCATAAGTGAAAGG  
GGAGAACTGGGGTCAAGGCTCTGGGCATGAGGACAACCTGCAGGGTGAAGCTGCGGCA  
GGAGTGACCAAGATCCAGGACAGAGTGATGGGGCCGAAGGCATAGAGGCCCCGAGGCT  
GAAGGGGAGGCCAGCCAGAGTCAGAAGGTGTAGAGGCCCCAGAGGCAGAAGGGGATGCC  
CAGGAGGCTGAAGGGGAGGCCAGCCAGAGTCAGAAGATGTAGAGGCCCCAGAGGCAGAA  
GGAGAGGCCAGCCAGAGTCAGAAGATGTAGAGACCCAGAGGCAGAATGGGAGGTCCAG  
CCAGAGTCAGAAGGTGCAGAAGCCCCGAGGCAGAAAAGGAGGCCAGCCAGAGACAGAA  
AGTGTAGAGGCCCTGGAGACTGAAGGGGAGGACGAGCCAGAGTCAGAAGGTGCAGAGGCC  
CAAGAGGCAGAAGAGGAGGCCAGGAGGCAGAAGGGCAGGCCAGCCAGAGTCAGAAGTT  
ATAGAGTCCCAGGAGGCAGAAGAGGAAGCCAGCCAGAGTCAGAAGATGTAGAGGCCCTG  
GAGGTTGAAGTGAGACCCAGGAGGCAGAAGGGGAGGCCAGCCAGAGTCAGAAGATGTA  
GAGGCCCCAGAGGCTGAAGGGGAGATGCAAGAGGCAGAAGAGGAGGCCCCAGCCAGAGTCA  
GACGGTGTAGAGGCCAGCCAAAGTCAGAAGGTGAAGAGGCCAGGAGGTTGAAGGGGAG  
ACCCAGAAGACAGAAGGGGATGCCAGCCAGAGTCAGACGGTGTAGAGGCCCCGAGGCA  
GAAGAGGAGGCACAGGAGGCTGAAGGGGAGGTCCAGGAGGCAGAAGGGGAGGCCACCCA  
GAGTCAGAAGATGTAGATGCCAGGAGGCAGAAGGGGAGGCCAGCCAGAATCAGAAGGT  
GTAGAGGCCCCAGAGGCAGAAGGGGAGGCCAGAAAGGCAGAAGGTATAGAGGCCCCAGAG  
ACTGAAGGGGAGGCCAGCCAGAGTCAGAAGGTATAGAGGCCCCAGAGGCTGAAGGGGAG  
GCCAGCCTGAGTCAGAAGGTGTAGAGGCCAGGATGCAGAAGGGGAGGCCAGCCAGAG  
TCAGAAGGTATAGAGGCCAGGAGGCTGAAGAGGAGGCCCAACCAGAGTTAGAAGGTGTA  
GAGGCCCCAGAGGCAGAAGGGGAGGCCAGCCAGAGTCAGAAGGTATAGAGGCCCCAGAG  
GCAGAAGGGGAGGCCCAACCAGAGTTAGAAGGTGTAGAGGCCCCGAGGCTGAAGAGGAG  
GCCAGCCAGAGCCAGAAGGCGTAGAGACCCCGAGGCTGAAGGGGAGGCCAGCCAGAG  
TCGGAAGGAGAACTCAAGGTGAGAAAAGGGGAGCCCTCAGGTCACTAGGAGATGGC  
CAATCTGAGGAGGCTTCTGAAAGCAGCAGCCAGTCCCTGAGGACAGGCCCACTCCACCC  
CCTTCCCAGGTAGAGACACTCCCCACCAAGGCCAGGCTCCCAACAGGCCCTTCTCTC  
TCCAGAGCATCTCTTGGGGCACTGCTGGCAGAAAGACTCAGAAAATGACCATGTACTT  
GGAGACACAAGGAGCCCTGATGCCAAGTCCACGGGGACCCCTCATGCAGAGAGGAAGGCC  
ACCAGGATGTACCCAGAAAGTTCTACTTCTGAGCAAGAAGAGGCCCTTTGGGCTCAAGG  
ACTCCAGAGCAGGGGGCAGTGAAGTTATGACCTACAAGAGGACCAGGCACTCGGAAGT  
CTCGCCCCACTGAGGCAGTGGGCGAGGCAGCGCTTTGGCCAAGATGACTTAGATTTC  
TAG

Clone variation with respect to NM\_178857.5

1791 c=>t;2268 c=>t;2578 c=>t;3436 c=>t;4401 g=>t;5126 c=>t;5837 c=>a;5860 a=>g;6723  
a=>g;6853 g=>a

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_178857

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OTI Disclaimer:</b>        | 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).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>OTI Annotation:</b>        | The open reading frame of this TrueClone was fully sequenced and found to be a perfect match to the protein associated to this reference.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Components:</b>            | 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).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>RefSeq:</b>                | <u>NM_178857.4, NP_849188.3</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>RefSeq Size:</b>           | 8233 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>RefSeq ORF:</b>            | 7443 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Locus ID:</b>              | 94137                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>UniProt ID:</b>            | <u>Q8IWN7</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Cytogenetics:</b>          | 8p23.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Gene Summary:</b>          | <p>This gene encodes a member of the doublecortin family. The protein encoded by this gene contains two N-terminal doublecortin domains, which bind microtubules and regulate microtubule polymerization, and two C-terminal large repetitive regions, both of which contain a high percentage of glutamine and glutamic acid residues. This protein is a retinal-specific protein. Its exact length varies among individuals due to the presence of a 16aa repeat in the first C-terminal repetitive region. The 16aa repeat is encoded by the highly polymorphic 48-bp repeat, and 1-6 copies of the 16aa repeat have been identified in normal individuals. The current reference sequence shown here has a single copy of the 16aa repeat. This protein and the RP1 protein, another retinal-specific protein, play essential and synergistic roles in affecting photosensitivity and outer segment morphogenesis of rod photoreceptors. Mutations in this gene cause occult macular dystrophy (OMD). [provided by RefSeq, Sep 2010]</p> |