

Product datasheet for SC316984

NPC1L1 (NM_001101648) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NPC1L1 (NM_001101648) Human Untagged Clone
Tag:	Tag Free
Symbol:	NPC1L1
Synonyms:	LDLCQ7; NPC11L1; SLC65A2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001101648 edited
 ATGGCGGAGGCCGCTGAGGGGCTGGCTGCTGTGGGCCCTGCTCCTGCGCTTGCCAG
 AGTGAGCCTTACACAACCATCCACCAGCCTGGCTACTGCGCCTTCTATGACGAATGTGGG
 AAGAACCAGAGCTGTCTGGAAGCCTCATGACACTCTCCAACGTGCTCCTGCTGTCCAAC
 ACGCCGGCCCGCAAGATCACAGGTGATCACCTGATCCTATTACAGAAGATCTGCCCCGCG
 CTCTACACCGGCCCAACACCCAAGCCTGCTGCTCCGCAAGCAGCTGGTATCACTGGAA
 GCGAGTGTGCGATCACCAAGGCCCTCCTCACCCGCTGCCAGCCTGCTCTGACAATTTT
 GTGAACCTGCACTGCCACAACACGTGCAGCCCCAATCAGAGCCTTTCATCAATGTGACC
 CGCGTGGCCAGCTAGGGGCTGGACAACCTCCAGCTGTGGTGGCCTATGAGGCCTTCTAC
 CAGCATAGCTTTGCCGAGCAGAGCTATGACTCCTGCAGCCGTGTGCGCGTCCCTGCAGCT
 GCCACGCTGGCTGTGGGACCATGTGTGGCGTGTATGGCTCTGCCCTTTGCAATGCCAG
 CGCTGGCTCAACTTCCAGGGAGACACAGGCAATGGTCTGGCCCCACTGGACATCACCTTC
 CACCTCTTGAGCCTGGCCAGGCCGTGGGGAGTGGGATTACGCCTCTGAATGAGGGGGTT
 GCACGTTGCAATGAGTCCCAAGGTGACGACGTGGCGACCTGCTCCTGCCAAGACTGTGCT
 GCATCCTGTCTGCCATAGCCCGCCCCAGGCCCTCGACTCCACCTTCTACCTGGGCCAG
 ATGCCGGGCAGTCTGGTCTCATCATCCTCTGCTCTGCTTTCGCTGTGGTACCATC
 CTGCTTGTGGGATTCCGTGTGGCCCCGCCAGGGACAAAAGCAAGATGGTGGACCCCAAG
 AAGGCCACCAGCCTCTCTGACAAGCTCAGCTTCTCCACCCACACCCTCCTTGCCAGTTC
 TTCCAGGGCTGGGGCACGTGGTGGCTTCTGTCGCTCTGACCATCTTGGTGTATCTGTG
 ATCCCGGTGGTGGCCTTGGCAGCGGGCCTGGTCTTTACAGAACTACTACGGACCCCGTG
 GAGCTGTGGTCCGCCCCAACAGCCAAGCCCGAGTGAGAAAGCTTTCCATGACCAGCAT
 TTCGGCCCTTCTCCGAACCAACCAGGTGATCCTGACGGCTCCTAACCGGTCCAGCTAC
 AGGTATGACTCTCTGCTGCTGGGGCCCAAGAACTTCCAGCGGAATCCTGGACCTGGACTTG
 CTGCTGGAGCTGCTAGAGCTGCAGGAGAGGCTGCGGCACCTCCAGGTATGGTCCGCCGAA
 GCACAGCGCAACATCTCCCTGCAGGACATCTGCTACGCCCCCTCAATCCGGACAATACC
 AGTCTCTACGACTGCTGCATCAACAGCCTCCTGCAGTATTTCCAGAACAACCGCACGCTC
 CTGCTGCTCACAGCCAACAGACTGATGGGGCAGACCTCCAAGTCGACTGGAAGGAC



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CATTTTCTGACTGTGCCAATGCCCGCTCACCTTCAAGGATGGCACAGCCCTGGCCCTG
 AGCTGCATGGCTGACTACGGGGCCCTGTCTTCCCCTTCCTTGCCATTGGGGGTACAAA
 GGAAAGGACTATTCTGAGGCAGAGGCCCTGATCATGACGTTTCCCTCAACAATTACCT
 GCCGGGACCCCCGTCTGGCCAGGCCAAGCTGTGGGAGGAGCCCTTCTTAGAGGAAATG
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 CTGCACTGGATCACTCGAGGTGTGTGCTGCTGCTGTTTCTCGCCCTGTTTCGGAGTGAGC
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 TACTTTGTTACCACCTTGGGCTACAACCTCTCCAGCGAGGCTGGGATGAATGCCATCTGC
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 GTGAGGCCCTCGGTGGAGCAGTTCATAAGTATCTTCCCTGGTTCTGAAACGACCGGCC
 AACATCAAATGTCCCAAAGGCGGCTGGCAGCATAACGACCTCTGTGAACTTGACTTCA
 GATGGCCAGGTTTTAGCCTCCAGGTTTCATGGCCTATCACAAGCCCTGAAAACTCACAG
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 CGGAAAGTGCCTGGAACAGACCCGGCTTTGAGGTCTTCCCTACACGATACCAATGTG
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 TTTGTGTCCCACATTACCCGCTCCTTTGCCATCAGCACCAGCCACCTGGCTGGAGAGG
 GCCAAAGAGGCCACCATCTATGGGAAGTGGGTGTTTTCAGGTGTGGCCATGACCAAC
 CTGCTGGCATCCTTGTCTGGGCTCGCCAAGGCCAGCTCATTAGATCTTCTTCTTC
 CGCCTCAACCTCCTGACTCTGCTGGGCTGCTGCATGGCTTGGTCTTCTGCCCCTGCT
 ATCCTCAGCTACGTGGGCTGACGTTAACCCGGCTCTGGCACTGGAGCAGAAGCGGGCT
 GAGGAGGCGGTGGCAGCAGTCATGGTGGCCTTGGCCAAATCACCCCTCCCGAGTCTCC
 ACAGCTGACAACATCTATGTCAACCACAGCTTTGAAGTTCTATCAAAGGTGCTGGTGCC
 ATCAGCAACTTCTGCCAACAATGGGCGCAGTTCTGA

Restriction Sites:

Please inquire

ACCN:

NM_001101648

Insert Size:

4200 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).

OTI Annotation:	The ORF of this clone has been fully sequenced and found to be a perfect match to NM_001101648.1.
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:	<u>NM_001101648.1, NP_001095118.1</u>
RefSeq Size:	4985 bp
RefSeq ORF:	3999 bp
Locus ID:	29881
UniProt ID:	<u>Q9UHC9</u>
Cytogenetics:	7p13
Protein Families:	Druggable Genome, Transmembrane
Gene Summary:	<p>The protein encoded by this gene is a multi-pass membrane protein. It contains a conserved N-terminal Niemann-Pick C1 (NPC1) domain and a putative sterol-sensing domain (SSD) which includes a YQRL motif functioning as a plasma membrane to trans-Golgi network transport signal in other proteins. This protein takes up free cholesterol into cells through vesicular endocytosis and plays a critical role in the absorption of intestinal cholesterol. It also has the ability to transport alpha-tocopherol (vitamin E). The drug ezetimibe targets this protein and inhibits the absorption of intestinal cholesterol and alpha-tocopherol. In addition, this protein may play a critical role in regulating lipid metabolism. Polymorphic variations in this gene are associated with plasma total cholesterol and low-density lipoprotein cholesterol (LDL-C) levels and coronary heart disease (CHD) risk. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2009]</p> <p>Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 3' coding region, compared to variant 1, resulting in a shorter protein (isoform 2), compared to isoform 1.</p>