

**PRODUCT INFORMATION**

<b>Tag</b>	C-Flag Tag
<b>Target</b>	NPC1L1
<b>Synonyms</b>	LDLCQ7; NPC11L1; SLC65A2
<b>Description</b>	Human NPC1L1 full length protein-synthetic nanodisc
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	Q9UHC9
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	Druggable Genome, Transmembrane
<b>Protein Pathways</b>	N/A
<b>Molecular Weight</b>	The human full length NPC1L1 protein has a MW of 148.7 kDa
<b>Background</b>	<p>The protein 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.</p>
<b>Formulation &amp; Reconstitution</b>	<p>Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions. Do not use solvents with a pH below 6.5 or those containing high concentrations of divalent metal ions (greater than 5 mM) in subsequent experiments.</p>
<b>Storage&amp;Shipping</b>	<p>Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C(Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.</p>
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate NPC1L1-Nanodisc 0.2 $\mu$ g Human NPC1L1-Nanodisc per well

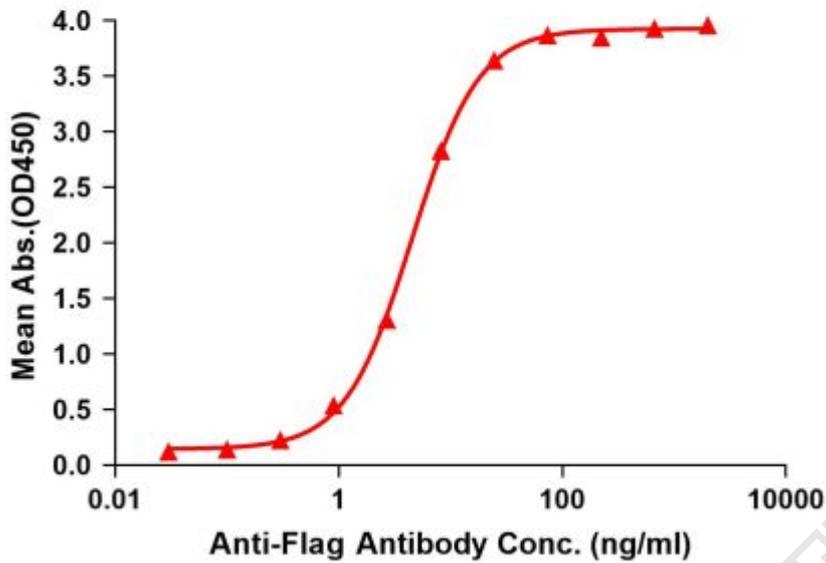


Figure1. Elisa plates were pre-coated with Flag Tag NPC1L1-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with NPC1L1-Nanodisc is 4.526ng/ml.



Figure2. Human NPC1L1-Nanodisc, Flag Tag on SDS-PAGE

