

HUMAN NPC1L1 FULL LENGTH PROTEIN**Cat.#:** 11070**Product Name:** Human NPC1L1 Full Length Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** LDLCQ7; NPC1L1; SLC65A2**Target:** NPC1L1**UNIPROT ID:** Q9UHC9**Description:** Human NPC1L1 full length protein-synthetic nanodisc

Background: 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.

Species/Host: HEK293**Molecular Weight:** The human full length NPC1L1 protein has a MW of 148.7 kDa

Formulation & Reconstitution: 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.

Storage & Shipping: 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.

ELISA assay to evaluate NPC1L1-Nanodisc
0.2 μ g Human NPC1L1-Nanodisc per well

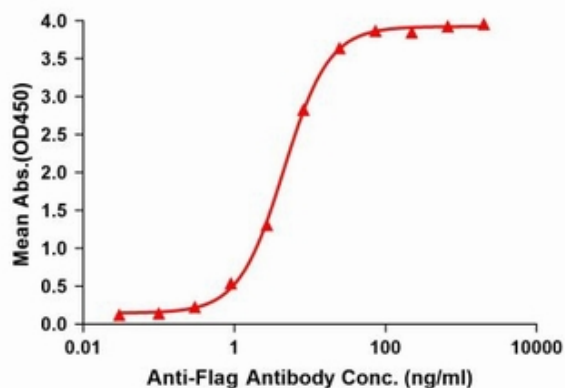


Figure1. Elisa plates were pre-coated with Flag Tag NPC1L1-Nanodisc (0.2 μ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC₅₀ for anti-Flag monoclonal antibody binding with NPC1L1-Nanodisc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



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