

## PRODUCT INFORMATION

<b>Tag</b>	C-Flag Tag
<b>Expression Host</b>	HEK293
<b>Target</b>	SCN5A
<b>Synonyms</b>	CDCD2; CMD1E; CMPD2; HB1; HB2; HBBD; HH1; ICCD; IVF; LQT3; Nav1.5; PFHB1; SSS1; VF1
<b>Description</b>	Human SCN5A full length protein-synthetic nanodisc
<b>Uniprot ID</b>	Q14524
<b>Protein Families</b>	Druggable Genome, Ion Channels: Sodium, Transmembrane
<b>Protein Pathways</b>	N/A
<b>Molecular Weight</b>	The human full length SCN5A protein has a MW of 226.9 kDa
<b>Delivery</b>	In Stock
<b>Formulation &amp; Reconstitution</b>	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.
<b>Sterility</b>	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 µm) prior to use.
<b>Storage&amp;Shipping</b>	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.
<b>Background</b>	The protein is an integral membrane protein and tetrodotoxin-resistant voltage-gated sodium channel subunit. This protein is found primarily in cardiac muscle and is responsible for the initial upstroke of the action potential in an electrocardiogram. Defects in this gene are a cause of long QT syndrome type 3 (LQT3), an autosomal dominant cardiac disease.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



### ELISA assay to evaluate SCN5A-Nanodisc 0.2 $\mu$ g Human SCN5A-Nanodisc per well

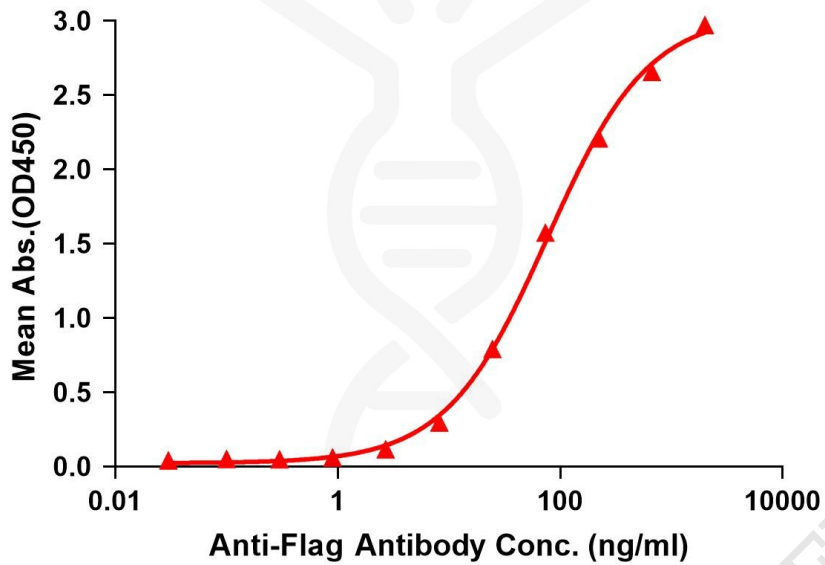


Figure 1. Elisa plates were pre-coated with Flag Tag SCN5A-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with SCN5A-Nanodisc is 76.50ng/ml.

kDa M R



Figure 2. Human SCN5A-Nanodisc, Flag Tag on SDS-PAGE

