

## PRODUCT INFORMATION

<b>Tag</b>	C-Flag Tag
<b>Target</b>	SCN2A
<b>Synonyms</b>	CDCD2; CMD1E; CMPD2; HB1; HB2; HBBD; HH1; ICCD; IVF; LQT3; Nav1.5; PFHB1; SSS1; VF1
<b>Description</b>	Human SCN2A full length protein-synthetic nanodisc
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	Q99250
<b>Expression Host</b>	HEK293
<b>Protein Families</b>	Druggable Genome, Ion Channels: Sodium, Transmembrane
<b>Protein Pathways</b>	N/A
<b>Molecular Weight</b>	The human full length SCN2A protein has a MW of 228.0 kDa
<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>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>	Voltage-gated sodium channels are transmembrane glycoprotein complexes composed of a large alpha subunit with four repeat domains, each of which is composed of six membrane-spanning segments, and one or more regulatory beta subunits. Voltage-gated sodium channels function in the generation and propagation of action potentials in neurons and muscle. This protein is one member of the sodium channel alpha subunit gene family. Allelic variants of this gene are associated with seizure disorders and autism spectrum disorder.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



**ELISA assay to evaluate SCN2A-Nanodisc**  
0.2 $\mu$ g Human SCN2A-Nanodisc per well

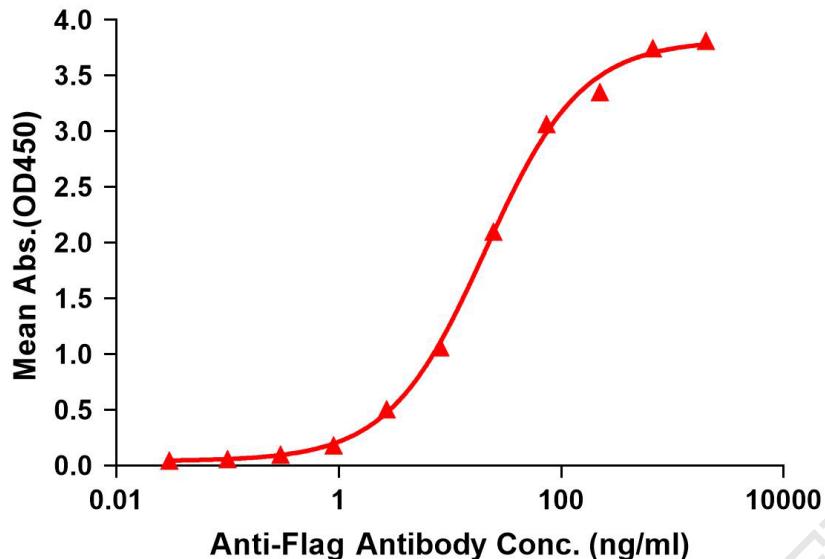


Figure 1. Elisa plates were pre-coated with Flag Tag SCN2A-Nanodisc (0.2 $\mu$ g/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with SCN2A-Nanodisc is 20.82ng/ml.



Figure 2. Human SCN2A-Nanodisc, Flag Tag on SDS-PAGE

