PRODUCT INFORMATION

Tag	C-Flag Tag
Target	CACNG1
Synonyms	CACNLG
Description	Human CACNG1 full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q06432
Expression Host	HEK293
Protein Families	Druggable Genome, Ion Channels: Other, Transmembrane
Protein Pathways	Arrhythmogenic right ventricular cardiomyopathy (ARVC), Cardiac muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM), MAPK signaling pathway
Molecular Weight	The human full length CACNG1 protein has a MW of 25.0 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. 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.
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.
Background	Voltage-dependent calcium channels are composed of five subunits. The protein encoded by this gene represents one of these subunits, gamma, and is one of two known gamma subunit proteins. This particular gamma subunit is part of skeletal muscle 1,4-dihydropyridine-sensitive calcium channels and is an integral membrane protein that plays a role in excitation-contraction coupling. This gene is part of a functionally diverse eight-member protein subfamily of the PMP-22/EMP/MP20 family and is located in a cluster with two family members that function as transmembrane AMPA receptor regulatory proteins (TARPs).
Usage	Research use only
Conjugate	Unconjugated

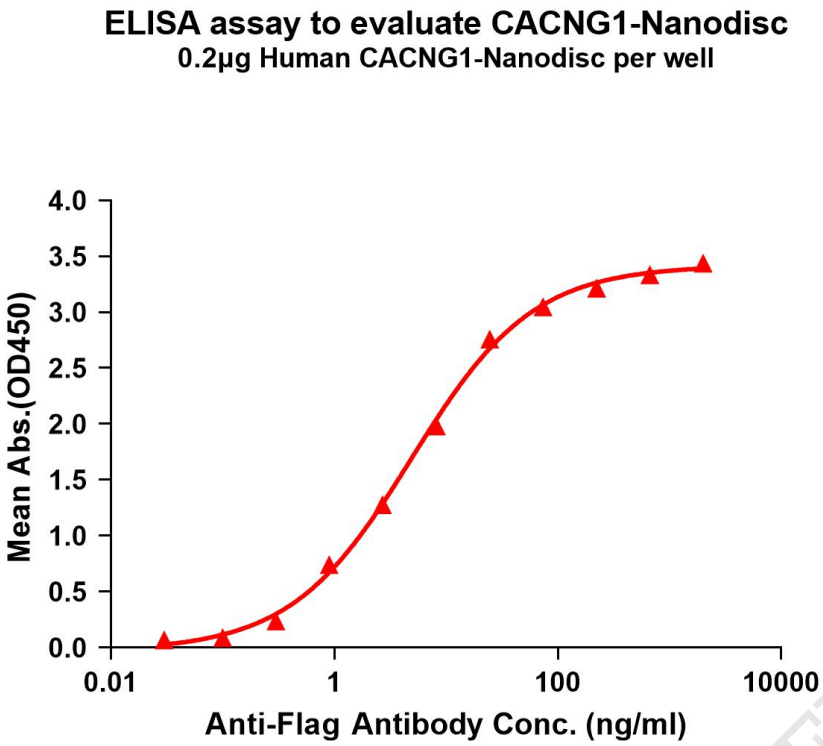

Figure 1. Elisa plates were pre-coated with Flag Tag CACNG1-Nanodisc (0.2μg/per well). Serial diluted anti-Flag monoclonal antibody solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-Flag monoclonal antibody binding with CACNG1-Nanodisc is 4.936ng/ml.

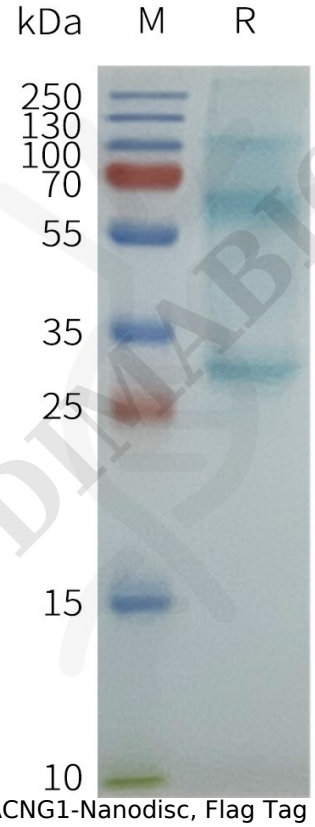

Figure 2. Human CACNG1-Nanodisc, Flag Tag on SDS-PAGE