

## CACNG1 protein

Human CACNG1 full length protein-synthetic nanodisc

CATALOG #  
**AAA129479**

HOST  
**HEK293**

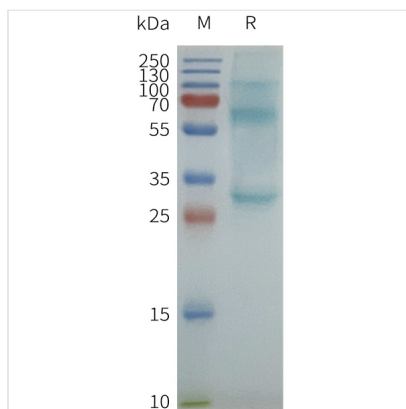
### PRODUCT SYNONYMS

CACNG1; Human CACNG1 full length protein-synthetic nanodisc; CACNLG; CACNG1 protein

### PRODUCT SPECIFICATIONS

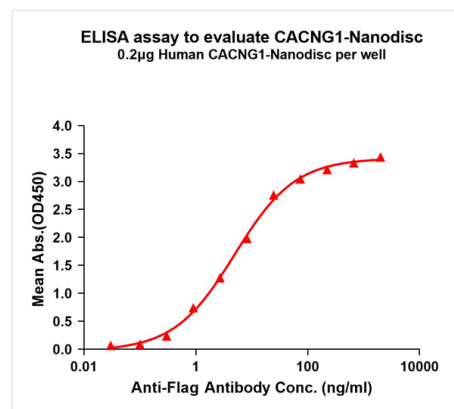
|                         |                                                                                                                                                                                                                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                    | HEK293                                                                                                                                                                                                                                                                   |
| Form/Format             | 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. Lyophilized from PBS. Normally 5%-          |
| Tag                     | C-DYKDDDDK                                                                                                                                                                                                                                                               |
| Preparation and Storage | Store at -20 degree C to -80 degree C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80 degree C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature. |

### IMAGES



SDS-PAGE

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



ELISA

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

### ADDITIONAL INFORMATION

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for CACNG1 protein | 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). |
| Product Categories/Family for CACNG1 protein   | Arrhythmogenic right ventricular cardiomyopathy (ARVC); Cardiac muscle contraction; Dilated cardiomyopathy; Hypertrophic cardiomyopathy (HCM); MAPK signaling pathway                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                                                |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 4502539                                                                                                                                                                                                                                        |
| NCBI GeneID                      | 786                                                                                                                                                                                                                                            |
| NCBI Accession #                 | NP_000718.1                                                                                                                                                                                                                                    |
| NCBI GenBank Nucleotide #        | NM_000727.3                                                                                                                                                                                                                                    |
| UniProt Accession #              | Q06432; Q14D59; B2R9N3                                                                                                                                                                                                                         |
| Molecular Weight                 | 25,028 Da                                                                                                                                                                                                                                      |
| NCBI Official Full Name          | voltage-dependent calcium channel gamma-1 subunit                                                                                                                                                                                              |
| NCBI Official Synonym Full Names | calcium channel, voltage-dependent, gamma subunit 1                                                                                                                                                                                            |
| NCBI Official Symbol             | CACNG1                                                                                                                                                                                                                                         |
| NCBI Official Synonym Symbols    | CACNLG                                                                                                                                                                                                                                         |
| NCBI Protein Information         | voltage-dependent calcium channel gamma-1 subunit; L-type calcium channel gamma polypeptide; neuronal dihydropyridine-sensitive calcium channel gamma subunit; dihydropyridine-sensitive L-type, skeletal muscle calcium channel subunit gamma |
| UniProt Protein Name             | Voltage-dependent calcium channel gamma-1 subunit                                                                                                                                                                                              |
| UniProt Gene Name                | CACNG1                                                                                                                                                                                                                                         |
| UniProt Synonym Gene Names       | CACNLG                                                                                                                                                                                                                                         |
| UniProt Entry Name               | CCG1_HUMAN                                                                                                                                                                                                                                     |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)  
Online datasheet: <https://stage.aaabiotech.com/hek293-protein/cacng1/129479>