

PRODUCT INFORMATION

Tag	C-Flag Tag
Target	CGRPR
Synonyms	CALCRL; CRLR; LMPHM8
Description	Human CGRPR-RAMP1 full length protein-synthetic nanodisc
Delivery	In Stock
Uniprot ID	Q16602
Expression Host	HEK293
Protein Families	Druggable Genome, GPCR, Transmembrane
Protein Pathways	Neuroactive ligand-receptor interaction, Vascular smooth muscle contraction
Molecular Weight	The human full length CGRPR protein has a MW of 53.0 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	The CGRP receptor (CGRPR) is a member of family B G protein coupled receptors (GPCRs), is expressed throughout the trigeminal system, including neurons and endothelial cells. They usually function with accessory proteins such as receptor activity modifying proteins (RAMPs) and Na/H exchange regulatory factors (NHERFs). CGRPR is a heterodimer complex of the calcitonin receptor-like receptor (CRLR) and receptor activity-modifying protein 1 (RAMP1). Therapeutics for migraine treatment are mostly targeting CRLR-RAMP1 protein-protein interaction surfaces, thereby blocking CGRP activity.
Usage	Research use only
Conjugate	Unconjugated



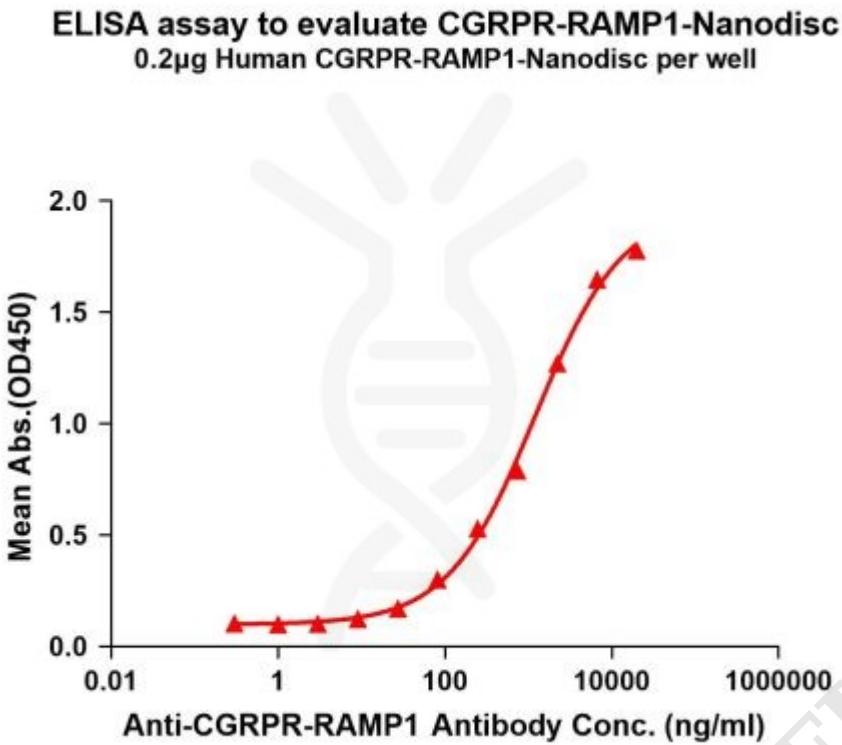


Figure1. Elisa plates were pre-coated with Flag Tag CGRPR-RAMP1-Nanodisc (0.2µg/per well). Serial diluted anti-CGRPR monoclonal antibody (BME100166) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CGRPR monoclonal antibody binding with CGRPR-RAMP1-Nanodisc is 1216ng/ml.



Figure2. Human CGRPR-RAMP1-Nanodisc, Flag Tag on SDS-PAGE

