

HUMAN CGRPR-RAMP1 FULL LENGTH PROTEIN

Cat.#: 12234

Product Name: Human CGRPR-RAMP1 Full Length Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: CALCRL; CRLR; LMPHM8

Target: CGRPR

UNIPROT ID: Q16602

Description: Human CGRPR-RAMP1 full length protein membrane nanoparticles (MNPs)

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.

Species/Host: HEK293

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.

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.

ELISA assay to evaluate CGRPR-RAMP1-MNP
0.5 μ g Human CGRPR-RAMP1-MNP per well

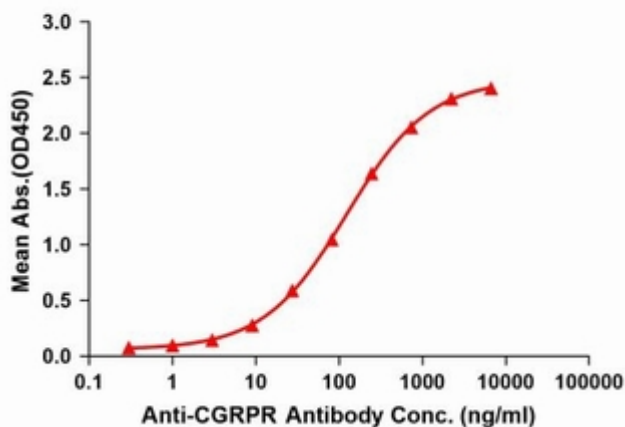


Figure1. Elisa plates were pre-coated with 0.5 μ g/per well purified human CGRPR-RAMP1 full length membrane nanoparticles. Serial diluted anti-CGRPR monoclonal antibody (28157) solutions were added, washed, and incubated with secondary antibody before Elisa reading. From above data, the EC50 for anti-CGRPR monoclonal antibody binding with CGRPR-RAMP1 full length membrane nanoparticles is 122.8ng/ml.