PRODUCT INFORMATION

Target	CGRPR and RAMP1
Synonyms	CRLR; CGRPR; LMPHM8 and RAMP1
Description	Recombinant human CGRPR protein with C-terminal human Fc tag and human RAMP1 protein with C-terminal mouse Fc tag
Delivery	In Stock
Uniprot ID	Q16602 and O60894
Expression Host	HEK293
Tag	C-Human Fc tag and C-mouse Fc tag
Molecular Characterization	CGRPR(Glu23-Asn140) hFc(Glu99-Ala330) and RAMP1(Cys27-Ser117) mFc(Pro99-Lys330)
Molecular Weight	The protein has a predicted molecular mass of 39.9 and 36.7 kDa after removal of the signal peptide. The apparent molecular mass of CGRPR-hFc and RAMP1-mFc is approximately 35-70 kDa due to glycosylation.
Purity	The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.
Formulation & Reconstitution	Lyophilized from sterile PBS, pH 7.4. Normally 5 % – 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 μm) prior to use.
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

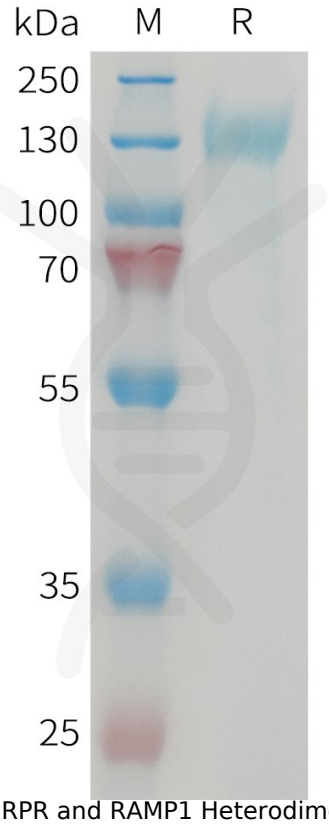

Figure 1. Human CGRPR and RAMP1 Heterodimer Protein, hFc Tag and mFc Tag on SDS-PAGE under reducing condition.