PRODUCT INFORMATION

Expression system E.coli

Domain 27-117aa

UniProt No. 060894

NCBI Accession No. NP_005846

Alternative Names

Receptor activity-modifying protein 1 precursor, CRLR activity-modifying protein 1, Calcitonin-receptor-like receptor activity-modifying protein 1, Receptor activity-modifying protein 1, receptor (G protein-coupled) activity modifying protein 1

PRODUCT SPECIFICATION

Molecular Weight

12.9 kDa (114aa)

Concentration 0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 80% by SDS-PAGE

Tag

His-Tag

Application SDS-PAGE,Denatured

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

RAMP is a member of the RAMP family of single-transmembrane-domain proteins, called receptor (calcitonin) activity modifying proteins (RAMPs). RAMPs are type I transmembrane proteins with an extracellular N terminus and a cytoplasmic C terminus. RAMPs are required to transport calcitonin-receptor-like receptor (CRLR) to the plasma membrane. CRLR, a receptor with seven transmembrane domains, can function as either a calcitonin-



gene-related peptide (CGRP) receptor or an adrenomedullin receptor, depending on which members of the RAMP family are expressed. In the presence of this (RAMP1) protein, CRLR functions as a CGRP receptor. The RAMP1 protein is involved in the terminal glycosylation, maturation, and presentation of the CGRP receptor to the cell surface. Recombinant human RAMP1 protein, fused to His-tag at N-terminus, was expressed in E. coli.

Amino acid Sequence

MGSSHHHHHH SSGLVPRGSH MGSCQEANYG ALLRELCLTQ FQVDMEAVGE TLWCDWGRTI RSYRELADCT WHMAEKLGCF WPNAEVDRFF LAVHGRYFRS CPISGRAVRD PPGS

General References

Kusano S, Kukimoto-Niino M, et al. (2008). Protein Sci. 17(11):1907-14. Heroux M, Hogue M, et al. (2007). J Biol Chem. 282(43):31610-20.

DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.