Calcitonin Gene Related Peptide (CGRP) Active Protein | CGRP active protein

Active Calcitonin Gene Related Peptide (CGRP)

CATALOG #	HOST	APPLICATIONS
AAA161798	**E Coli**	**Activity Assay, Cell Culture**

PRODUCT SYNONYMS

Calcitonin Gene Related Peptide (CGRP); Active Calcitonin Gene Related Peptide (CGRP); Calcitonin Gene Related Peptide; CALCB; CGRP2; CALC2; CGRP-II; Calcitonin Gene Related Peptide 2; Calcitonin 2; Calcitonin Related Polypeptide Beta4; CGRP active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met1~Val13 4
Applicable Applications for CGRP active protein	Activity Assay, Cell Culture
Species	Rat
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	9.4
Research Area	Infection immunity, Endocrinology, Neuro science, Hormone metabolism, Bone metabolism, Dermatology
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

IMAGES

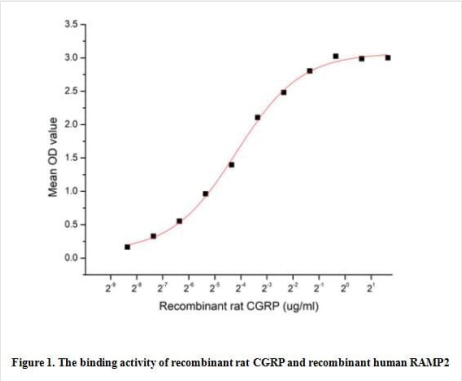
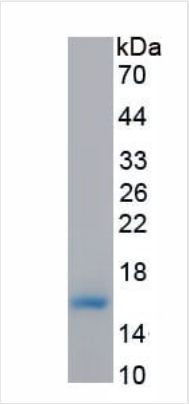


Figure 1. The binding activity of recombinant rat CGRP and recombinant human RAMP2

Bioactivity
Calcitonin gene-related peptide (CGRP) is a highly potent vasoactive peptide released from sensory nerves. CGRP is a 37-amino acid and it has two major forms (alpha and beta). It belongs to a group of peptides that all act on an unusual receptor family. These receptors consist of calcitonin receptor-like receptor (CLR) linked to an essential receptor activity modifying protein (RAMP) that is necessary for full functionality. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant rat CGRP and recombinant human RAMP2. Briefly, CGRP was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to RAMP2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-CGRP pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant rat CGRP and recombinant human RAMP2 was shown in Figure 1, the EC50 for this effect is 0.06 ug/mL.



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for CGRP active protein	Active proteins

NCBI AND UNIPROT INFORMATION

NCBI GI #	25453380
NCBI GeneID	171519
NCBI Accession #	NP_612522.1
NCBI GenBank Nucleotide #	NM_138513.1
UniProt Accession #	P10093
Molecular Weight	14,965 Da
NCBI Official Full Name	calcitonin gene-related peptide 2
NCBI Official Synonym Full Names	calcitonin-related polypeptide, beta
NCBI Official Symbol	Calcb
NCBI Protein Information	calcitonin gene-related peptide 2
UniProt Protein Name	Calcitonin gene-related peptide 2
UniProt Gene Name	**Calcb**
UniProt Synonym Gene Names	CGRP-II

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.

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Online datasheet: https://www.aaabiotech.com/e-coli-active-protein/calcitonin-gene-related-peptide-cgrp/161798