

# Recombinant human RGN protein

Catalog Number: ATGP1187

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-299aa

### UniProt No.

Q15493

### NCBI Accession No.

NP\_690608

### Alternative Names

Regucalcin, RC, SMP30

## PRODUCT SPECIFICATION

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### Molecular Weight

35.4 kDa (319aa)

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2M urea, 20% glycerol

### Purity

> 85% 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

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### Description

RGN (Regucalcin) belongs to the SMP-30/CGR1 family. This protein is Ca (2+) -binding protein that does not contain EF-hand motif of Ca (2+) -binding domain. RGN plays a pivotal role in the keep of intracellular Ca<sup>2+</sup> homeostasis due to activating Ca<sup>2+</sup> pump enzymes in the plasma membrane (basolateral membrane), microsomes (endoplasmic reticulum) and mitochondria of many cells. Also, it plays a multifunctional role in the regulation of cell functions in liver, kidney cortex, heart and brain and a suppressor protein for cell signaling systems in many cell types.

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### Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MSSIKIECVL PENCRCGESP VWEEVSNLL FVDIPAKKVC RWDSFTKQVQ  
RVTMDAPVSS VALRQSGGYV ATIGTKFCAL NWKEQSAVVL ATVDNDKKN RFNDGKVDPA GRYFAGTMAE ETAPAVLERH  
QGALYSLFPD HHVKKYFDQV DISNGLDWSL DHKIFYIDS LSYSVDAFDY DLQTGQISNR RSVYKLEKEE QIPDGMCI  
EGKLWVACYN GGRVIRLDPV TGKRLQTVKL PVDKTTSCCF GGKNYSEMYV TCARDGMDPE GLLRQPEAGG IFKITGLG  
VGIAPYSYAG

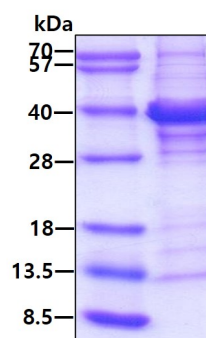
### General References

Chakraborti S., et al. (2010) *Biochemistry*. 49:3436-3444

Yamaguchi M., et al. (2005) *Int J Mol Med*. 15: 372-389

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.