

Recombinant human GCA protein

Catalog Number: ATGP0886

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-217aa

UniProt No.

P28676

NCBI Accession No.

NP_036330.1

Alternative Names

Grancalcin, GCL

PRODUCT SPECIFICATION

Molecular Weight

26.1 kDa (237aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol 0.1M NaCl

Purity

> 95% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

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

GCA, also known as Grancalcin, is calcium-binding protein that is especially abundant in human neutrophils. It belongs to the penta EF-hand (PEF) subfamily of EF-hand proteins, which also comprises calpain, sorcin, peflin, and ALG-2. This protein undergoes important conformational changes upon binding of calcium, which subsequently exposes hydrophobic amino acid residues, which direct the protein to hydrophobic surfaces. It interacts with L-plastin, a protein known to have actin bundling activity, which suggests that GCA may play a role in the regulation of neutrophils adhesion. Recombinant human GCA protein, fused to His-tag at N-terminus, was

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expressed in E. coli and purified by using conventional chromatography.

Amino acid Sequence

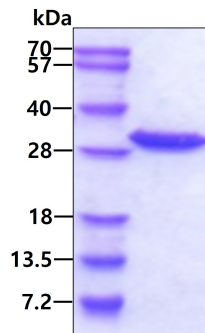
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GDSVYTYFSA VAGQDGEVDA EELQRCLTQS GINGTYSPPS LETCRIMIAM LDRDHTGKMG FNAFKELWAA LNAWKENFMT
VDQDGSSTVE HHELRLQAIGL MGYRLSPQTL TTIVKRYSKN GRIFFDDYVA CCVKLRALTD FFRKRDHLQQ GSANFIYDDF
LQGTMAI

General References

Teahan C.G., et al. (1992). *Biochem. J.*, 286: 549-554.
Boyhan A., et al. (1992). *J. Biol. Chem.*, 267: 2928-2933.

DATA

SDS-PAGE



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