

Recombinant human CapG protein

Catalog Number: ATGP0439

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-348aa

UniProt No.

P40121

NCBI Accession No.

AAH00728

Alternative Names

Macrophage-capping protein, MCP, AFCP, Macrophage-capping protein Actin capping protein GCAP39, Actin regulatory protein CAP G, CAPG, Capping protein (actin filament) gelsolin like, Capping protein gelsolin like, gCap39, Gelsolin like capping protein, Macrophage capping protein, mbh1, Myc basic motif homolog 1.

PRODUCT SPECIFICATION

Molecular Weight

38.5 kDa (348aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol

Purity

> 95% by SDS-PAGE

Tag

Non-Tagged

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

Macrophage-capping protein, also known as CAPG, belongs to the gelsolin/villin family of actin-regulatory proteins. CAPG is a calcium-sensitive DNA-binding protein that plays a role in macrophage function. It is expressed in macrophages and macrophage-like cells and can localize both to the nucleus and the cytoplasm. This protein reversibly blocks the barbed ends of F-actin filaments in a Ca²⁺ and phosphoinositide-regulated

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manner, but does not sever preformed actin filaments. Recombinant human CAPG was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

MYTAIPQSGS PFPGSVQDPG LHVWRVEKLK PVPVAQENQG VFFSGDSYLV LHNGPEEVSH LHLWIGQQSS RDEQGACAVL
AVHLNNTLLGE RPVQHREVQG NESDLFMSYF PRGLKYQEGG VESAFHKTST GAPAAIKKLY QVKGKKNIRA TERALNWDSF
NTGDCFILD L GQNIFAWCGG KSNILERNKA RDLALAIRDS ERQGKAQVEI VTDGEIPAEM IQVLGPKPAL KEGNPEEDLT
ADKANAQAAA LYKVSDATGQ MNLTKVADSS PFALELLISD DCFVLDNGLC GKIIYWKGRK ANEKERQAAL QVAEGFISRM
QYAPNTQVEI LPQGRESPIF KQFFKDWK

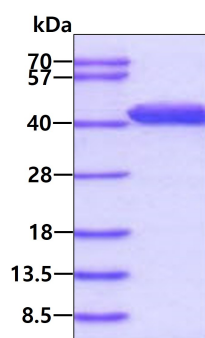
General References

Dabiri G A., et al. (1992) *J Biol Chem.* 267:16545-16552.

Pellieux C., et al. (2003) *J Biol Chem.* 278(3):29136-44.

DATA

SDS-PAGE



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