

# Recombinant E.coli GroEL protein

Catalog Number: GRL3001

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-548aa

### UniProt No.

P0A6F5

### NCBI Accession No.

NP\_418567.1

### Alternative Names

groL, groEL, mopA, Protein Cpn60, 60 kDa chaperonin, groEL protein, chaperonin groel

## PRODUCT SPECIFICATION

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### Molecular Weight

57.3 kDa (548aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 25mM Tris-HCl buffer (pH 7.5) containing 100mM NaCl, 5mM 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

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### Description

GroEL protein is the major heat shock protein of E. coli and belongs to the chaperonin (HSP60) family. GroEL protein prevents misfolding of proteins and promotes the refolding and proper assembly of unfolded polypeptides generated under stress condition. GroEL gene was amplified by PCR from E. coli and cloned into an expression vector. This protein was overexpressed in E. coli and was purified by using conventional chromatography techniques.

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## Amino acid Sequence

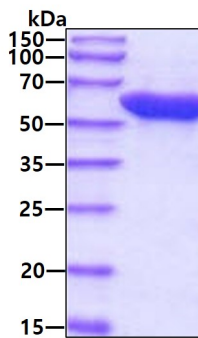
MAAKDVKFGN DARVKMLRGV NVLADAVKVT LGPKGRNVVL DKSFGAPTIT KDGVSVAREI ELEDKFENMG AQMVKEVASK  
ANDAAGDGTT TATVLAQAI TEGLKAVAAG MNPMDLKRG DKAVTAAVEE LKALSVPCSD SKAIAQVGTI SANSDETVGK  
LIAEAMDKVG KEGVITVEDG TGLQDELDDV EGMQFDRGYL SPYFINKPET GAVELESPFI LLADKKISNI REMLPVLEAV  
AKAGKPLLI AEDVEGEALA TLVVNTMRGI VKVAAVKAPG FGDRRKAMLQ DIATLTGGTV ISEEIGMELE KATLEDLGQA  
KRVVINKDTT TIIDGVGEEA AIQGRVAQIR QQIEEATSDY DREKLQERVA KLAGGVAVIK VGAATEVEMK EKKARVEDAL  
HATRAAVEEG VVAGGGVALI RVASKLADLR QONEDQNVGI KVALRAMEAP LRQIVLNCGE EPSVVANTVK GGDGNYGYNA  
ATEEYGNMID MGILDPTKVT RSALQYAASV AGLMITTECM VTDLPKNDAA DLGAAGGMGG MGGMGGMM

## General References

Hemmingsen, S.M., et al (1988) Nature . 333(6171) 330-334  
Braig, K., et al (1994) Nature 371(6498) 578-586  
Chen, L and Singler, P.B. (1999) Cell 99(7) 757-768

## DATA

### SDS-PAGE



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