

# Product information

## GroEL, 1-548 aa

*E.coli*, Recombinant, *E.coli*

Cat. No. IBGRL3001

**Synonyms:** 60 kDa chaperonin, Protein Cpn60, groL, mopA

**NCBI Accession No.:** NP\_418567

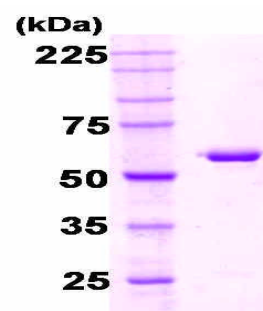
**Description:** GroEL protein is the major heat shock protein of *E.coli* and belongs to the chaperonin (HSP60) family. GroEL protein prevents misfolding of proteins and promotes the refolding and proper assembly of unfolded polypeptides generated under stress condition. GroEL gene was amplified by 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.

**Form:** Liquid. In 25 mM Tris buffer (pH 7.5) containing 100 mM NaCl, 5 mM DTT, 10% glycerol

**Molecular Weight:** 57.3kDa (548aa), confirmed by MALDI-TOF

**Purity:** > 95% by SDS - PAGE

**Concentration:** 1 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MAAKDVKFGN DARVKMLRGV NVLADAVKVT LGPKGRNVVL DKSFGAPTIT KDGVSVAREI ELEDKFENMG AQMVKEVASK ANDAAGDGTT  
TATVLAQAII TEGLKAVAAG MNPMDLKRGI DKAFTAAVEE LKALSVPCSD SKAIAQVGTI SANSDETVGK LIAEAMDKVG KEGVITVEDG  
TGLQDEL DVV EGMQFDRGYL SPYFINKPET GAVELESPFI LLADKKISNI REMLPVLEAV AKAGKPLLI AEDVEGEALA TLVVNTMRGI  
VKVAAVKAPG FGDRRKAMLQ DIATLTGGTV ISEEIGMELE KATLEDLGQA KRVVINKDIT TIIDGVGEEA AIQGRVAQIR QQIEEATSDY  
DREKLQERVA KLAGGVAVIK VGAATEVEMK EKKARVEDAL HATRAAVEEG VVAGGGVALI RVASKLADLR QQNEDQNVGI 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

Welch, R.A., *et al* (2002) *Proc. Natl. Acad. Sci. U.S.A* .**99**(26)17020-17024

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.