

# **California Bioscience**

## **Product Datasheet**

Product Name	GroEL (HSP60) E.Coli Recombinant
Cata No	CB500754
Source	Escherichia Coli.
Synonyms	CPN60, GROEL, HSP60, HSP65, SPG13, CHA60, GROL, crpA, mopA, 60 kDa
	chaperonin, Protein Cpn60, groEL protein, b4143, JW4103.

### 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 polypeptiedes 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.

Recombinant GroEL produced in E.Coli is a single, non-glycosylated polypeptide chain containing 548 amino acids and having a molecular mass of 57.3kDa.

#### **Physical Appearance**

Sterile filtered colorless solution.

#### Purity

Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

#### Formulation

The groEL protein contains 25mM Tris-HCl buffer (pH 7.5), 100mM NaCl, 1mM DTT and 10% Glycerol.

#### Stability

Store at  $4^{\circ}$  if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Avoid multiple freeze-thaw cycles.

#### Sequence

MAAKDVKFGN DARVKMLRGV NVLADAVKVT LGPKGRNVVL DKSFGAPTIT KDGVSVAREIELEDKFENMG AQMVKEVASK ANDAAGDGTT TATVLAQAII TEGLKAVAAG MNPMDLKRGIDKAVTAAVEE LKALSVPCSD SKAIAQVGTI SANSDETVGK LIAEAMDKVG KEGVITVEDGTGLQDELDVV EGMQFDRGYL SPYFINKPET GAVELESPFI LLADKKISNI REMLPVLEAVAKAGKPLLII AEDVEGEALA TAVVNTIRGI VKVAAVKAPG FGDRRKAMLQ DIATLTGGTVISEEIGMELE KATLEDLGQA KRVVINKDTT TIIDGVGEEA AIQGRVAQIR QQIEEATSDYDREKLQERVA KLAGGVAVIK VGAATEVEMK EKKARVEDAL HATRAAVEEG VVAGGGVALIRVASKLADLR GQNEDQNVGI KVALRAMEAP LRQIVLNCGE EPSVVANTVK GGDGNYGYNAATEEYGNMID MGILDPTKVT RSALQYAASV AGLMITTECM VTDLPKNDAA DLGAAGGMGG MGGMGGMM