

# **California Bioscience**

# **Product Datasheet**

Product Name	GroEL (HSP60) Human Recombinant
Cata No	CB501407
Source	Escherichia Coli.
Synonyms	CPN60, GROEL, HSP60, HSP65, SPG13, CHA60, GROL, crpA, mopA, 60 kDa heat shock protein mitochondrial, Heat shock protein 60, HSP-60, 60 kDa chaperonin, Chaperonin 60, Mitochondrial matrix protein P1, P60 lymphocyte protein, HuCHA60, HSPD1.

#### Description

GroEL, HSP60 is a chaperonin located in the mitochondria which is responsible for the transportation & refolding of proteins from the cytoplasm directly into the mitochondrial matrix. GroEL is regulated by the HSP10 cochaperonin, which is a single heptameric protein ring having a molecular mass of 10 kDa which form a unique complex with HSP60. HSP10, GroES coordinates the ATPase activity of the HSP60 subunits in order to allow the release of bound polypeptide in a manner that is productive for its correct folding. The GroEL protein having the NCBI accession number NP\_002147 was purified by using conventional chromatography techniques. Recombinant GroEL, HSP60 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 593 amino acids and having a molecular mass of 63kDa.

The HSP60 is fused to His tag at N-terminus.

#### **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, 5mM DTT and 10% Glycerol.

## Stability

Store at 4°C 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.