

# **California Bioscience**

# **Product Datasheet**

Product Name	GroES (HSP10) E.Coli Recombinant
Cata No	CB500755
Source	Escherichia Coli.
Synonyms	CPN10, GROES, HSP10, HSPE1, 10 kDa chaperonin, Protein Cpn10, groES protein,
	11.2 kDa stress response protein, Heat shock protein 10.

# Description

GroES protein is the co-chaperonin of GroES in E.coli and assists protein folding. GroEL mediated folding requires the co-chaperonin GroES which is essential for viability. GroES is composed of a single heptameric ring of 10kDa subunits that binds to the ends of the GroEL cylinder. GroES 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 GroES produced in E.Coli is a single, non-glycosylated polypeptide chain containing 97 amino acids and having a molecular mass of 10.4 kDa.

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

#### Stability

Store at 4°C if entire vial will be used within 2-4 weeks.

Store, frozen at  $-20^{\circ}$  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

MNIRPLHDRV IVKRKEVETK SAGGIVLTGS AAAKSTRGEV LAVGNGRILE GEVKPLDVKVGDIVIFNDG YGVKSEKIDN EEVLIMSESD ILAIVEA.