



Product Datasheet

Product Name	GroES (HSP10) Human Recombinant
Cata No	CB501406
Source	<i>Escherichia Coli.</i>
Synonyms	CPN10, GROES, HSP10, HSPE1, Chaperonin-10, 10 kDa heat shock protein mitochondrial, 10 kDa chaperonin, Early-pregnancy factor, EPF.

Description

HSP10 is part of the molecular chaperons, that are crucial for their efficient folding of proteins in normal as well as stress conditions. GroES function is to bind to HSP60 in the presence of ATP, thus causing a change in the HSP60 conformation & enclosing the protein substrate within the complex. ATP hydrolysis by chaperonin-60 which destabilizes the HSP10-HSP60 complex, thereby allowing it to dissociate and secrete the substrate protein. GroES having the NCBI accession number of NP_002148 was purified by using conventional chromatography techniques.

Recombinant GroES produced in E.Coli is a single, non-glycosylated polypeptide chain containing 102 amino acids and having a molecular mass of 10 kDa.

Physical Appearance

Sterile filtered colorless solution.

Purity

Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC.

(b) Analysis by SDS-PAGE.

Formulation

The GroES protein contains 20mM Tris buffer pH-8 & 50mM NaCl.

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.

Sequence

MAGQAFRKFL PLFDRV LVER SAAETVTKGG
IMLPEKSQ GK VLQATVVAVG SGSKGKGGEI
QPVSVKVGDK VLLPEYGGTK VLLDDKDYFL
FRDGDILGKY VD