

Recombinant Human Heat Shock 10kDa Protein 1 (chaperonin 10)

Cat. No. HSPE1-6930H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human HSPE1 was expressed in E. coli and purified by using conventional chromatography techniques. MW: 10 KDa.
Species	Human
Source	E.coli
ProteinLength	1-102aa
Description	HSPE1 is a member of the highly conserved group of molecular chaperons, which are necessary for efficient folding of many proteins in normal and stress conditions and have been implicated in several human diseases. HSPE1 is the ~10kD mammalian equivalent to GroES of E. coli. The function of Hsp10 is to bind Hsp60 (also known as chaperonin-60), in the presence of ATP, thereby promoting a conformational change in Hsp60 and enclosing the protein substrate within the complex. ATP hydrolysis by Hsp60 destabilizes the Hsp60/ HSPE1 complex, allowing it to dissociate and release the substrate protein.
Form	Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 50 mM NaCl
Molecular Mass	10 kDa (102 aa), confirmed by MALDI-TOF
AA Sequence	MAGQAFRKFL PLFDRVLVER SAAETVTKGG IMLPEKSQ GK VLQATVVAVG SGSKGKGGEI QPVSVKVGDK VLLPEYGGTK VVLDDKDYFL FRDGDILGKY VD

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Endotoxin	< 1.0 eu per 1 µg of protein (determined by lal)
Purity	>95% by SDS - PAGE
Applications	SDS-PAGE
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.
Concentration	1 mg/ml (determined by Bradford assay)

GENE INFORMATION

Gene Name	HSPE1 heat shock 10kDa protein 1 (chaperonin 10) [Homo sapiens]
Official Symbol	HSPE1
Synonyms	HSPE1; heat shock 10kDa protein 1 (chaperonin 10); heat shock 10kD protein 1 (chaperonin 10); 10 kDa heat shock protein, mitochondrial; CPN10; GROES; chaperonin 10; 10 kDa chaperonin; early-pregnancy factor; EPF; HSP10;
Gene ID	3336
mRNA Refseq	NM_002157
Protein Refseq	NP_002148
MIM	600141
UniProt ID	P61604

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Chromosome Location	2q33.1
Function	ATP binding; chaperone binding; chaperone binding; protein binding; unfolded protein binding;

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