clpB Protein, E.coli

Cat. No.:	HY-P701845
Synonyms:	clpB; Chaperone protein ClpB
Species:	E.coli
Source:	E. coli
Accession:	P63286 (M1-Q857)
Gene ID:	75205855
Molecular Weight:	

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	ClpB operates as a pivotal component within a stress-induced multi-chaperone system, collaboratively orchestrating cellular recovery from heat-induced damage alongside DnaK, DnaJ, and GrpE. Acting upstream of DnaK, ClpB plays a crucial role in processing protein aggregates, with its ATPase activity stimulated upon protein binding. The ensuing ATP hydrolysis facilitates the unfolding of denatured protein aggregates, potentially exposing new hydrophobic binding sites on ClpB-bound aggregates. This orchestrated process contributes to the solubilization and refolding of denatured protein aggregates, an essential cooperative effort involving DnaK. In its functional state, ClpB forms a homohexamer, and the oligomerization is intricately regulated by ATP, underscoring the dynamic nature of its involvement in cellular stress responses.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA