

Recombinant E.coli DnaK Chaperone Hsp70, Co-chaperone with DnaJ (1-384)

Cat. No. DnaK-314E **Lot. No.** (See product label)

SPECIFICATION

Product Overview	The ATPase domain of recombinant DNaK was overexpressed in E. coli and purified to apparent homogeneity by using conventional column chromatography techniques (384 aa, 41.6 kDa).
Species	E.coli
Source	E.coli
Description	DnaK, originally identified for its DNA replication by bacteriophage I in E. coli is the bacterial hsp70 chaperone. This protein is involved in the folding and assembly of newly synthesized polypeptide chains and in preventing the aggregation of stress-denatured proteins. DnaK(amino acids1-384) is N-terminal ATPase domain and ATP bound to the ATPase domain induces a conformational change in the substrate binding domain(residues385-638). The protein coding region of the ATPase domain of DNaK (amino acids 1-384) was amplified by PCR and cloned into an E. coli expression vector.
Formulation	Liquid. In 25 mM Tris-HCl buffer (pH 7.5) containing 100 mM NaCl, 5 mM DTT, 10% glycerol.
Molecular Weight	41.6 kDa (384 aa).
Purity	> 95% by SDS – PAGE.

 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

Concentration	1 mg/ml (determined by Bradford assay).
Sequence	MGKIIGIDLG TTNSCVAIMD GTTPRVLENA EGDRTTPSII AYTQDGETLV GQPAKRQAVT NPQNTLFAIK RLIGRRFQDE EVQRDVSIMP FKIIAADNGD AWVEVKGQKM APPQISAEVL KKMKKTAEDY LGEPVTEAVI TVPAYFNDAQ RQATKDAGRI AGLEVKRIIN EPTAAALAYG LDKGTGNRTI AVYDLGGGTF DISIIEIDEV DGEKTFEVLA TNGDTHLGGE DFDSRLINYL VEEFKKDQGI DLRNDPLAMQ RLKEAAEKAK IELSSAQQTD VNLPHYTADA TGPKHMKNIKV TRAKLESLVE DLVNRSEIPL KVALQDAGLS VSDIDDVILV GGQTRMPMVQ KKVAEFFGKE PRKDVNPDEA VAIGAAVQGG VLTG
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.
GENE INFORMATION	
Gene Name	dnaK
Synonyms	dnaK; dnaK chaperone Hsp70, co-chaperone with DnaJ; Hsp70 protein; ECK0014; groPAB; groPC; groPF; grpC; grpF; JW0013; seg; chaperone Hsp70; DNA biosynthesis; autoregulated heat shock proteins.
Gene ID	944750
Protein Refseq	NP_414555.1
UniProt ID	P0A6Y8