

## dnaK

### Recombinant *E. coli* DNAK (N-term aa 1-384)

<b>Catalog No.</b>	CSI15612A	<b>Quantity:</b>	100 µg
	CSI15612B		500 µg

**Alternate Names:** ECK0014, JW0013, groPAB, groPC, groPF, grpC, grpF, seg

**Description:** DnaK, originally identified for its DNA replication by bacteriophage λ 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 acids 1-384) is N-terminal ATPase domain and ATP bound to the ATPase domain induces a conformational change in the substrate binding domain (residues 385-638). 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. The ATPase domain of DNAK was overexpressed in *E. coli* and the recombinant protein was purified to apparent homogeneity by using conventional column chromatography techniques.

**Concentration:** 1 mg/ml (determined by Bradford assay)

**Gene ID:** 944750

**Protein Accession No:** NP\_414555

**Source:** *E. coli*

**Molecular Weight:** 41.6kDa (384aa)

**Formulation:** Liquid. In 25 mM Tris-HCl buffer (pH 7.5) containing 100 mM NaCl, 5 mM DTT, 10% glycerol

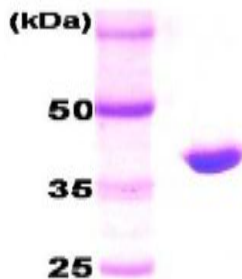
**Purity:** > 95% by SDS - PAGE

**Amino Acid Sequence:** MGKIIIGIDLG TTNSCVAIMD GTTPRVLENA EGDRTTPSII AYTQDGETLV  
GQPAKRQAVT NPQNTLFAIK RLIGRRFQDE EVQRDVSI MP FKIIAADNGD  
AWVEVKGQKM APPQISAEVL KKMKKTAEDY LGEPVTEAVI TVPAYFNDAQ  
RQATKDAGRI AGLEVKRIIN EPTAAALAYG LDKGTGNRTI AVYDLGGGTF DISIIEIDEV  
DGEKTFEVL A TNGDTHLGGE DFDSRLINYL VEEFKKDQGI DLRNDPLAMQ  
RLKEAAEKAK IELSSAQQT D VNLPIYTADA TGPKHMKNIKV TRAKLESLVE  
DLVNRSIEPL KVALQDAGLS VSDIDDVILV GGQTRMPMVQ KKVAEFFGKE  
PRKDVNPDEA VAIGAAVQGG VLTG



**Storage & Stability:**

Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -80°C. **Avoid repeated freezing and thawing cycles.**



13.5% SDS-PAGE (3ug)

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**Cell Sciences®**  
480 Neponset Street  
Bldg 12A  
Canton, MA 02021

Toll Free: 888-769-1246  
Phone: 781-828-0610  
Fax: 781-828-0542

E-mail: [info@cellsciences.com](mailto:info@cellsciences.com)  
Website: [www.cellsciences.com](http://www.cellsciences.com)