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## **DnaK(amino acids 1-384) Recombinant, *E.coli***

Cat. No. DNK3002

Size ; 100  $\mu$ g

**Description :** DnaK, originally identified for its DNA replication by bacteriophage  $\lambda$  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. 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.

**Form :** Liquid. 25 mM Tris-HCl, pH7.5, 100 mM NaCl, 5 mM DTT, 10%Glycerol.

**Molecular Weight :** 41.6kDa (384 amino acids)

**Purity :**  $\geq$  95% by SDS PAGE

**Sequence :**

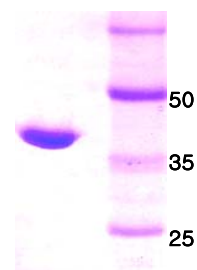
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MGKIIGIDLG TTNSCVAIMD GTTPRVLENA EGDRTTPSII AYTQDGETLV GQPAKRQAVT
NPQNTLFAIK RLIGRRFQDE EVQRDVSIMP FKIIAADNGD AWVEVKGQKM APPQISAEVL
KKMKKTAEDY LGEPVTEAVI TVPAYFNDAQ RQATKDAGRI AGLEVKRIIN EPTAAALAYG
LDKGTGNRTI AVYDLGGGTF DISIIEIDEV DGEKTFEVL TNGDTHLGGE DFDSRLINYL
VEEFKKDQGI DLRNDPLAMQ RLKEAAEKAK IELSSAQQTD VNLPHYTADA TGPKHMNIKV
TRAKLESLVE DLVNRSEIPL KVALQDAGLS VSDIDDVILV GGQTRMPMVQ KKVAEFFGKE
PRKDVNPDEA VAIGAAVQGG VLTG
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**Storage :** Store at -20 °C. Avoid freeze/thaw cycles.

**Reference :** Bardwell & Craig (1984) Proc. Natl. Acad. Sci. 81,  
848-852

Zhu et al., (1996) Science 272, 1606-1614.

Naoki tanaka., *et al* (2002) PNAS 26(99)15398-15403



13.5 % SDS-PAGE