

# Recombinant E.coli DnaK(1-638aa) protein

Catalog Number: DNK3001

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

1-638aa

### UniProt No.

P0A6Y8

### NCBI Accession No.

NP\_414555.1

### Alternative Names

Chaperone protein dnaK, HSP70, groP, grpF, seg, Heat shock protein 70, Chaperone Hsp70, Co chaperone with DnaJ, dnaK, Heat shock 70 kDa protein,

## PRODUCT SPECIFICATION

---

### Molecular Weight

69 kDa (638aa)

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

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

### Purity

> 85% by SDS-PAGE

### Tag

Non-Tagged

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### 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 acids 1-638) was amplified by PCR and cloned into an E. coli expression vector. DnaK 1-638 was overexpressed in E. coli and was purified to apparent homogeneity by using conventional column chromatography techniques.

# Recombinant E.coli Dnak(1-638aa) protein

Catalog Number: DNK3001

## Amino acid Sequence

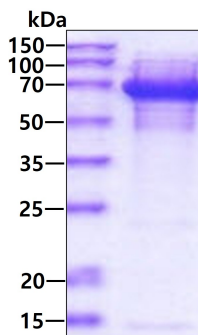
MGKIIGIDLG TTNSCVAIMD GTTPRVLENA EGDRTTPSII AYTQDGETLV GQPAKRQAVT NPQNTLFAIK RLIGRRFQDE  
EVQRDVSIMP FKIIAADNGD AWVEVKGQKM APPQISAEVL KKMKKAEDY LGPEVTEAVI TVPAYFNDAQ RQATKDAGRI  
AGLEVKRIIN EPTAAALAYG LDKGTGNRTI AVYDLGGGTF DISIIEIDEV DGEKTFEVL TNGDTHLGGE DFDSRLINYL  
VEEFKKDQGI DLRNDPLAMQ RLKEAAEKAK IELSSAQQT D VNLPHYTADA TGPKHMNIKV TRAKLESLVE DLVNRSIEPL  
KVALQDAGLS VSDIDDVILV GGQTRMPMVQ KKVAEFFGKE PRKDVNPDEA VAIGAAVQGG VLTGDVKDVL LLDVTPLSLG  
IETMGVMTT LIAKNTTIPT KHSQVFSTAE DNQSAVTIHV LQGERKRAAD NKSLGQFNLD GINPAPRGMP QIEVTFDIDA  
DGILHVS AKD KNSGKEQKIT IKASSGLNED EIQKMVRDAE ANAEADRKFE ELVQTRNQG D HLLHSTRKQV EEAGDKLPAD  
DKTAIESALT ALETALKGED KAAIEAKMQE LAQVSQKLME IAQQQHAQQQ TAGADASANN AKDDDVVDAE FEEVKDKK

## General References

Bardwell & Craig., et al (1984) Proc. Natl. Acad. Sci. 81, 848-852.  
Zhu et al.,et al (1996) Science 272, 1606-1614.  
Naoki tanaka., et al (2002) PNAS 26(99)15398-15403

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.