# **PRODUCT INFORMATION**

Expression system E.coli

**Domain** 508-638aa

**UniProt No.** P0A6Y8

NCBI Accession No. NP\_414555

### **Alternative Names**

Dnak (508-638), A lid covering the substrate, Heat shock protein 70, Heat shock 70 kDa protein, HSP70, Chaperone protein dnaK, Chaperone Hsp 70, Co chaperone with DnaJ, dnaK, Heat shock 70 kDa protein,

## **PRODUCT SPECIFICATION**

## **Molecular Weight**

14.6 kDa (132aa)

**Concentration** 1mg/ml (determined by BCA assay)

### Formulation

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

**Purity** > 95% 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 (residues 508-638) of the substrate binding domain is alpha-helical and appears to act as a lid covering the substrate binding cleft. DnaK (amino acid 508-638) was overexpressed in E. coli and purified to apparent homogeneity by using conventional column



NKMAXBiO we support you, we believe in your research Recombinant E.coli Dnak(508-638aa) protein Catalog Number: DNK3004

chromatography techniques. Additional amino acid (Met) is attached at N- terminus

### **Amino acid Sequence**

MNEDEIQKMV RDAEANAEAD RKFEELVQTR NQGDHLLHST RKQVEEAGDK LPADDKTAIE SALTALETAL KGEDKAAIEA KMQELAQVSQ KLMEIAQQQH AQQQTAGADA SANNAKDDDV VDAEFEEVKD KK

### **General References**

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

# DATA



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

15% SDS-PAGE (3ug)