

Recombinant E.coli Dnak(385-638aa) protein

Catalog Number: DNK3003

PRODUCT INFORMATION

Expression system

E.coli

Domain

385-638aa

UniProt No.

P0A6Y8

NCBI Accession No.

NP_414555

Alternative Names

Dnak (C-term, 385-638), Substrate binding domain, 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

27.7 kDa (255aa) confirmed by MALDI-TOF

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

> 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. The protein coding region of the substrate binding domain of DNAK (amino acids 385-638) was amplified by PCR and cloned into an E. coli expression vector. The substrate binding domain of DNAK was overexpressed in E. coli and the recombinant protein was purified to

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apparent homogeneity by using conventional column chromatography techniques. Additional amino acid (Met) is attached at N- terminus

Amino acid Sequence

MDVKDVLILLD VTPLSLGIET MGGVMTTLIA KNTTIPTKHS QVFSTAEDNQ SAVTIHVLQG ERKRAADNKS LGQFNLDGIN
PAPRGMPQIE VTFDIDADGI LHVSAKDKNS GKEQKITIKA SSSLNEDEIQ KMVRDAEANA EADRFEEELV QTRNQGDHLL
HSTRKQVEEA GDKLPADDKT AIESALTALE TALKGEDKAA IEAKMQELAQ VSQKLMEIAQ QQHAQQQTAG ADASANNAKD
DDVVDAEFEE VKDKK

General References

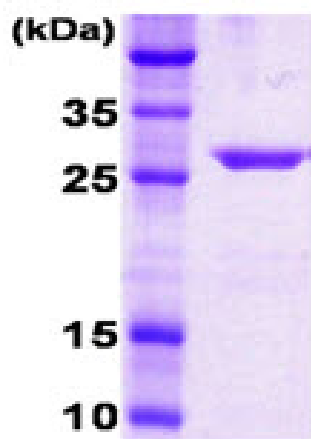
Bardwell & Craig (1984) Proc. Natl. Acad. Sci. 81, 848-852

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

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

DATA

SDS-PAGE



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

14% SDS-PAGE (3ug)