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.

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Amino acid Sequence

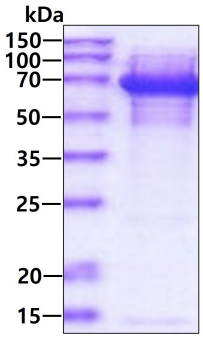
MGKIIGIDLG TTNSCVAIMD GTTPRVLENA EGDRTTPSII AYTQDGETLV GQPAKRQAVT NPQNTLFAIK RLIGRRFQDE EVQRDVSIMP FKIIAADNGD AWVEVKGQKM APPQISAEVL KKMKKTAEDY LGEPVTEAVI TVPAYFNDAQ RQATKDAGRI AGLEVKRIIN EPTAAALAYG LDKGTGNRTI AVYDLGGGTF DISIIEIDEV DGEKTFEVLA TNGDTHLGGE DFDSRLINYL VEEFKKDQGI DLRNDPLAMQ RLKEAAEKAK IELSSAQQTD VNLPYITADA TGPKHMNIKV TRAKLESLVE DLVNRSIEPL KVALQDAGLS VSDIDDVILV GGQTRMPMVQ KKVAEFFGKE PRKDVNPDEA VAIGAAVQGG VLTGDVKDVL LLDVTPLSLG IETMGGVMTT LIAKNTTIPT KHSQVFSTAE DNQSAVTIHV LQGERKRAAD NKSLGQFNLD GINPAPRGMP QIEVTFDIDA DGILHVSAKD KNSGKEQKIT IKASSGLNED EIQKMVRDAE ANAEADRKFE ELVQTRNQGD 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.