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SA6027X Recombinant DnaK (amino acids 508-638)

Alternate names: Chaperone protein dnaK, Heat shock 70 kDa protein, Heat shock protein 70, MT0365,

MTCY13E10.10, Rv0350

Quantity: 0.5 mg
Concentration: 1.0 mg/ml

Background: DnaK, originally identified for its DNA replication by bacteriophage λ 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.

Uniprot ID: POA6Y8

NCBI: <u>AP_000678.1</u>

GenelD: 944750
Species: E. coli
Source: E. coli

Format: State: Liquid purified protein

Purity: >95% by SDS-PAGE

Buffer System: 25 mM Tris-HCl, pH 7.5, 100 mM NaCl, 1 mM DTT, 10% Glycerol

Description: Dnak (residues 508-638) of the substrate binding domain is α-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 chromatography techniques. Additional amino acid (Met) is attached at N-

terminus.

AA Sequence:

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

VDAEFEEVKD KK

Molecular weight: 14.6 kDa (132 amino acids)

Storage: Store (in aliquots) at -20°C. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

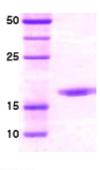
General Readings: Zhu et al., (1996) Science 272, 1606-1614.

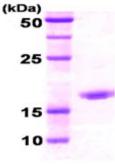
Naoki Tanaka., et al (2002) PNAS 26(99)15398-15403.



Pictures:

Recombinant Dna K (amino acids 508-638): 14% SDS-PAGE





14% SDS-PAGE (3ug)