

dnaK

Recombinant *E. coli* DnaK Substrate Binding Domain (aa 508-638)

Catalog No. CSI13242 Quantity: 20 μg

CSI13243 100 µg CSI13244 1.0 mg

Alternate Names: HSP-70, HSP70, DnaK, Chaperone protein dnaK, Heat shock protein 70, Heat shock 70

kDa protein, groP, grpF, seg, b0014, JW0013.

Description: DnaK, originally identified for its DNA replication by bacteriophage I 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 a-helical and appears to act as a lid covering the substrate binding cleft. DnaK (amino acid 508-638) was purified to apparent homogeneity by using conventional column chromatography

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

Recombinant DnaK Substrate Binding domain produced in *E.coli* is a single, non-

glycosylated polypeptide chain containing 132 amino acids.

Physical Appearance: Sterile filtered colorless solution.

Gene ID: 944750

Source: E. coli

Molecular Mass: 14.6 kDa

Formulation: The protein contains 25 mM Tris-HCl, pH 7.5 + 100 mM NaCl + 5 mM DTT and 10%

Glycerol.

Purity: Greater than 95.0% as determined by:

(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

Amino Acid Sequence: MNEDEIQKMV RDAEANAEAD RKFEELVQTR NQGDHLLHST RKQVEEAGDK

LPADDKTAIE SALTALETAL KGEDKAAIEA KMQELAQVSQ KLMEIAQQQH

AQQQTAGADA SANNAKDDDV VDAEFEEVKD KK

Storage & Stability: Store at 4°C if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

E-mail: <u>info@cellsciences.com</u>
Website: www.cellsciences.com

Avoid multiple freeze-thaw cycles.

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