



Product Datasheet

Product Name	DnaK Lid Covering Substrate E.Coli Recombinant
Cata No	CB500761
Source	<i>Escherichia Coli.</i>
Synonyms	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 α -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 Lid Covering Substrate domain produced in *E.Coli* is a single, non-glycosylated polypeptide chain containing 132 amino acids and having a molecular mass of 14.6 kDa.

Physical Appearance

Sterile filtered colorless solution.

Purity

Greater than 95.0% as determined by:

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

Formulation

The DnaK protein contains 25mM Tris-HCl, pH7.5, 100mM NaCl, 5mM DTT and 10%Glycerol.

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).

Avoid multiple freeze-thaw cycles.

Sequence

MNEDEIQKMV RDAEANA EAD RKFEELVQTR
NQG D HLLHST RKQVEEAGDK
LPADDKTAIESALTALETAL KGEDKAAIEA
KMQELAQVSQ KLMEIAQQQH
AQQQTAGADASANNAKDDDVVDAEFEEVKDKK.