Certificate of Analysis and Data Sheet

Recombinant *E.Coli* Heat Shock Protein Cofactor 70 (HSP24)

Catalog No.	**Source:**
228-10582	*Escherichia coli*

Synonyms:

HSP24, HSPB25.3, HSP-70 Cofactor, Protein grpE, Heat shock protein B25.3, grpE, b2614, JW2594.

Introduction:

GrpE , co-chaperone of E.coli, participates actively in the response to hyperosomotic and heat shock by preventing the aggregation of stress-denatured proteins in association with DnaK. This protein is the nucleotide exchange factor for DnaK and may function as a thermosensor. Several rounds of ATP-dependent interactions between DnaJ, DnaK and GrpE are required for fully efficient folding.

Description:

GrpE Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 197 amino acids and having a molecular mass of 21.8 kDa.
The GrpE is purified by proprietary chromatographic techniques.

Source:

Escherichia Coli.

Physical Appearance:

Sterile Filtered colorless solution.

Formulation:

The HSP24 protein solution contains 20 mM Tris-HCl pH-8 and 0.1 M NaCl.

Stability:

GrpE although stable 4°C for 4 weeks, should be stored desiccated below -18°C.
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).
Please prevent freeze-thaw cycles.

Amino Acid Sequence:

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MSSKEQKTPE  GQAPEEIIMD  QHEEIEAVEP  EASAEQVDPR  DEKIANLEAQ
LAEAQTRERD  GILRVKAEME  NLRRRTELDI  EKAHKFALEK  FINELLPVID
SLDRALEVAD  KANPDMSAMV  EGIELTLKSM  LDVVRKFGVE  VIAETNVPLD
PNVHQAIAMV  ESDDVAPGNV  LGIMQKGYTL  NGRTIRAAMV  TVAKAKA
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Purity:

Greater than 90.0% as determined by:
(a) Analysis by RP-HPLC.
(b) Analysis by SDS-PAGE.