

# Recombinant e.coli GrpE protein (V44I)

Catalog Number: GRP0701

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-197aa

### UniProt No.

P09372

### NCBI Accession No.

NP\_417104.1

### Alternative Names

HSP-70 cofactor, Heat shock protein B25.3, HSP24, GrpE, HSP 70 cofactor.

## PRODUCT SPECIFICATION

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### Molecular Weight

21.8 kDa (197aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 100mM NaCl

### Purity

> 90% 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

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### Description

GrpE, co-chaperone of E. coli, participates actively in the response to hyperosmotic 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, Dna K and GrpE are required for fully efficient folding. Recombinant GrpE protein was overexpressed in E. coli and purified by using the conventional column chromatography techniques.

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### Amino acid Sequence

MSSKEQKTPE GQAPEEIIIMD QHEEIEAVEP EASAEQVDPR DEKIANLEAQ LAEAQTRERD GILRVKAEME NLRRRTELDI  
EKAHKFALEK FINELLPVID SLDRALEVAD KANPDMSAMV EGIELTLKSM LDVVRKFGVE VIAETNVPLD PNVHQAIAMV  
ESDDVAPGNV LGIMQKGYTL NGR TIRAAMV TVAKAKA

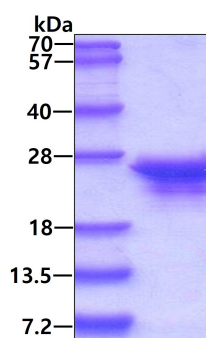
### General References

Lipinska B, King J, Ang D, Georgopoulos C (1988). Nucleic Acids Res.16: 545-7562  
Liberek K., Marszalek J., Ang D, Georgopoulos C., Zylicz M. (1991). Proc. Natl. Acad.Sci. u.S.A. 88: 2874-2878.

## DATA

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### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.