

## Recombinant *Saccharomyces Cerevisiae* HSP104

**Cat. No.** HSP104-1258S    **Lot. No.** (See product label)

### SPECIFICATION

|                            |                                                                                                                                                                                                                                                                                                                                       |
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| <b>Product Overview</b>    | Recombinant <i>Saccharomyces Cerevisiae</i> HSP104 is a single, non-glycosylated polypeptide chain containing 908 amino acids and having a molecular mass of 102 kDa. Hsp104 was cloned into an <i>E. coli</i> expression vector and was purified to apparent homogeneity by using conventional column chromatography techniques.     |
| <b>Species</b>             | Yeast                                                                                                                                                                                                                                                                                                                                 |
| <b>Source</b>              | <i>S.Cerevisiae</i>                                                                                                                                                                                                                                                                                                                   |
| <b>Description</b>         | HSP104 is a molecular chaperone required for stress tolerance and for maintenance of [psi(+)] prions in the budding yeast <i>Saccharomyces cerevisiae</i> . Hsp104 can protect yeast cells against high temperature and high concentration of ethanol but mutation studies have shown this protein is not required for normal growth. |
| <b>Physical Appearance</b> | Sterile filtered colorless solution.                                                                                                                                                                                                                                                                                                  |
| <b>Purity</b>              | Greater than 90.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.                                                                                                                                                                                                                                               |
| <b>Formulation</b>         | The HSP-104 protein solution contains 20mM Tris-HCl, pH 7.4, 100mM NaCl, 2mM EDTA and 5% Glycerol.                                                                                                                                                                                                                                    |
| <b>Stability</b>           | 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.                                                                                                  |

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## GENE INFORMATION

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | HSP104 Heat shock protein that cooperates with Ydj1p (Hsp40) and Ssa1p (Hsp70) to refold and reactivate previously denatured, aggregated proteins; responsive to stresses including: heat, ethanol, and sodium arsenite; involved in [PSI+] propagation [ <i>Saccharomyces cerevisiae</i> ]                                                                                                                                                                                                                         |
| <b>Synonyms</b>            | YLL026W; Heat shock protein that cooperates with Ydj1p (Hsp40) and Ssa1p (Hsp70) to refold and reactivate previously denatured, aggregated proteins; responsive to stresses including: heat, ethanol, and sodium arsenite; involved in [PSI+] propagation; Heat shock protein that cooperates with Ydj1p (Hsp40) and Ssa1p (Hsp70) to refold and reactivate previously denatured, aggregated proteins; responsive to stresses including: heat, ethanol, and sodium arsenite; involved in [PSI+] propagation Hsp104p |
| <b>Gene ID</b>             | 850633                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Refseq</b>      | NP_013074                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Chromosome Location</b> | XII                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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