

## Recombinant Human Heat Shock 27kDa Protein 2

**Cat. No.** HSPB2-1255H    **Lot. No.** (See product label)

### SPECIFICATION

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>    | Recombinant Human HSP-27 is a single, non-glycosylated polypeptide chain containing 205 amino acids and having a molecular mass of 22.7 kDa. Hsp27 was over-expressed in <i>E.coli</i> and purified by conventional chromatography.                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Source</b>              | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Description</b>         | HSP27 (also known as the Estrogen-Regulated 24K protein, and hsp 28) is a member of the mammalian small heat shock protein family. Hsp27 is expressed constitutively in many tissues and its expression is increased to high levels after various types of stress including elevated temperatures, toxic metals, drugs and oxidants. Also, Hsp27 is phosphorylated in vivo on three phosphorylation sites (Ser15, Ser78 and Ser82) by protein kinases including MAPKAP kinase 2 and the stress-activated protein kinase SAPK2 (p38). |
| <b>Physical Appearance</b> | Sterile Filtered colorless solution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Purity</b>              | Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Formulation</b>         | The HSP27 protein solution contains 20mM Hepes pH-7.5, 1mM DTT and 100mM KCl.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Sequence</b>            | MTERRVPFSL LRGPSWDPFR DWYPHSRLFD QAFGLPRLPE EWSQWLGGSS                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

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WPGYVRPLPP AAIESPAVAA PAYSRALSRQ LSSGVSEIRH TADRWRVSLD  
 VNHFAPDELT VKTKDGVVEI TGKHEERQDE HGYISRCFTR KYTLPPGVDP  
 TQVSSSLSPG GTLTVEAPMP KLATQSNEIT IPVTFESRAQ LGGPEAAKSD ETAAK.

**Stability**

HSP-27 although stable at 4°C for 1 week, 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.

**GENE INFORMATION**
**Gene Name**

HSPB2 heat shock 27kDa protein 2 [ Homo sapiens ]

**Synonyms**

heat shock 27kDa protein 2; MKBP; HSP27; Hs.78846; LOH11CR1K; MGC133245;  
 HSPB2; heat shock 27kD protein 2; heat-shock protein beta-2;HspB2;DMPK-binding  
 protein

**Gene ID**

3316

**mRNA Refseq**

NM\_001541

**Protein Refseq**

NP\_001532

**MIM**

602179

**UniProt ID**

Q16082

**Chromosome  
Location**

11q22-q23

**Function**

enzyme activator activity; protein binding

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