

Human Hsp27/HSPB1 Protein

Cat. No. HSP-HE001

Description

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|-------------------------|--|
| Source | Recombinant Human Hsp27/HSPB1 Protein is expressed from E.coli with His tag at the C-Terminus. It contains Met1-Lys205. |
| Accession | NP_001531.1 |
| Molecular Weight | The protein has a predicted MW of 23.74 kDa. The protein migrates to 25-30 kDa based on Bis-Tris PAGE result. |
| Endotoxin | Less than 1EU per µg by the LAL method. |
| Purity | > 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC |

Formulation and Storage

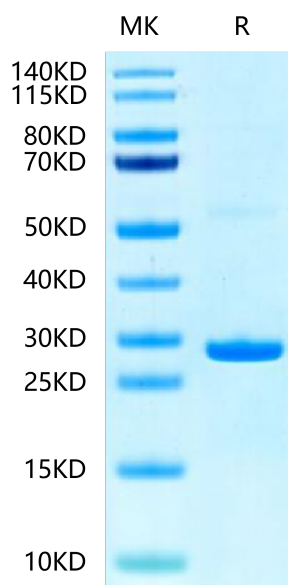
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|-----------------------|---|
| Formulation | Lyophilized from 0.22µm filtered solution in PBS, 2mM DTT (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization. |
| Reconstitution | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water. |
| Storage | -20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles. |

Background

Heat shock protein beta-1 (HSPB1, also known as HSP27) is a small heat shock protein involved in many cellular processes and reportedly protects cells against oxidative stress. This protein is expressed only in insulin-dependent tissues (heart, skeletal muscle, and fat tissue), and expression of HspB7 is regulated by many different factors. HspB7 has an unusual N-terminal sequence, a conservative α-crystallin domain, and very short C-terminal domain lacking conservative IPV tripeptide involved in a small heat shock proteins oligomer formation.

Assay Data

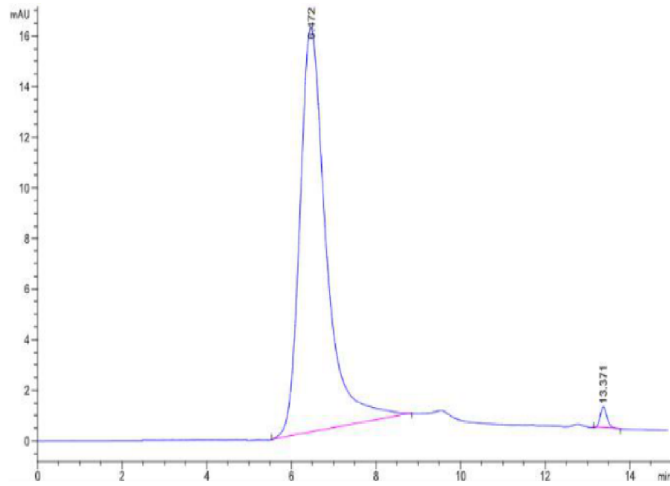
Bis-Tris PAGE



Human Hsp27 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



The purity of Human Hsp27 is greater than 95% as determined by SEC-HPLC.