

## 37-1134: Human HSP70 / HSPA1A Recombinant Protein (His Tag)(Discontinued)

**Reactivity :** Human

**Alternative Name :** HEL-S-103 Protein, HSP70-1 Protein, HSP70-1A Protein, HSP70I Protein, HSP72 Protein, HSPA1 Protein,

### Description

#### Source : HEK293 Cells

HSPA1A is a member of the Hsp70 protein family. The 70 kilodalton heat shock proteins (Hsp70s) are a family of ubiquitously expressed heat shock proteins. HSP are abundant and conserved proteins present in all cells. Upon temperature shock or other stress stimuli, HSP are synthesized intracellularly, which may protect cells from protein denaturation or from death. Extracellularly, HSP can serve a cytokine function to initiate both innate and adaptive immunity through activation of APC. HSP serves also a chaperone function and facilitates presentation of antigen peptide to T cells. Molecular chaperones of the Hsp70 family have diverse functions in cells. They assist the folding of newly synthesized and stress-denatured proteins, as well as the import of proteins into organelles, and the dissociation of aggregated proteins. The well-conserved Hsp70 chaperones are ATP dependent: binding and hydrolysis of ATP regulates their interactions with unfolded polypeptide substrates, and ATPase cycling is necessary for their function. All cellular functions of Hsp70 chaperones use the same mechanism of ATP-driven polypeptide binding and release.

### Product Info

**Amount :** Human HSP70 / HSPA1A Recombinant Protein (His Tag)(Discontinued) / 200 µg  
**Purification :** > 95 % as determined by SDS-PAGE.  
**Content :** Formulation Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.  
**Storage condition :** Store it under sterile conditions at -20°C to -80°C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.  
**Amino Acid :** Ala2-Asp641

### Application Note

Endotoxin : < 1.0 EU per 1 µg protein as determined by the LAL method.

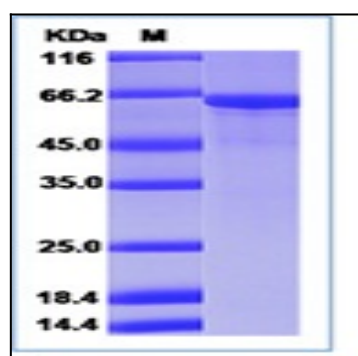


Fig 1: Human HSP70 / HSPA1A Recombinant Protein (His Tag)