

# HSP70

Cat. # K1300,K1301

**Also Known as:** HSPA1A; HSP72; HSPA1; HSP70I; HSP70-1; HSP70-1A  
**NCBI Reference:** NM\_005345  
**MW (no tag):** 70 kDa  
**Species:** Human  
**Source:** Bacterial recombinant  
**Tag:** No  
**Stock Buffer:** 20 mM Tris, 150 mM NaCl, 2 mM  $\beta$ ME, 10% Glycerol  
**Concentration:** See tube label  
**Quality Assurance:** ~90% by SDS-PAGE

**Description:** HSP70 a critical chaperone protein that has a high affinity for unfolded polypeptide chains. It binds extended peptide segments with a net hydrophobic character exposed by polypeptides during translation and membrane translocation, or following stress-induced damage. In cooperation with other chaperones, Hsp70 stabilizes preexistent proteins against aggregation and mediates the folding of newly translated polypeptides in the cytosol as well as within organelles. Hsp70 and Hsp40 recruit some misfolded proteins to the ubiquitin E3 ligase CHIP for ubiquitination.

**Storage:** Store at -80°C; avoid multiple freeze-thaw cycles

**Note:** N/A

**Literature:**

1. Walerych ., *et al.* (2009) *Oncogene* 28: 4284-94
2. Daugaard M, *et al.* (2007) *FEBS Lett.* 581: 3702-3710
3. Klucken J, *et al.* (2006) *FASEB J.* 20, 2050
4. Freeman BC, *et al.* (1995) *EMBO J* 14: 2281-22-92

