

## Anti-Hsp70/Hsc70 Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 11095 (clone N27F3-4)  
**Size:** 100ug in PBS, pH 7.4, purified by Protein G affinity chromatography.

### BACKGROUND

Hsp70 genes, members of a multigene family, encode heat-inducible 70kDa heat-shock proteins that function as molecular chaperones. They have been identified in most organelles of eukaryotic cells as well as in bacteria. The N-terminus of Hsp70 binds ATP with high affinity and the C-terminus binds proteins and polypeptides. Hsp70s bind nascent polypeptides as well as partially folded intermediates of proteins, thus preventing their aggregation and/or misfolding. Binding of ATP triggers a conformational change that results in the release of bound protein. Hsp70s function in protein synthesis, protein folding and oligomerization, and protein transport.

### SPECIFICATION SUMMARY

**Antigen:** Recombinant Hsp70/Hsc70  
**Host Species:** Mouse  
**Antibody Class:** IgG1  
**Preservatives:** 0.1% sodium azide.

### SPECIFICITY

This antibody recognizes inducible and constitutive Hsp70/Hsc70 of human, mouse, rat, rabbit, monkey, guinea pig, hamster, chicken, bovine, canine, ovine, porcine, fish, *Xenopus*, *Drosophila*, *C. elegans*, and plants. The epitope is in the region of amino acids 503-640 of human Hsp70.

### APPLICATIONS

*Immunoblotting:* use at 1ug/ml. A band of 72-73kDa is detected.

*Immunohistochemistry:* use at 1-10ug/ml.

*Immunoprecipitation:* 1-10ug/ml.

*Flow cytometry:* use at 10ug/ml.

These are recommended concentrations.

User should determine optimal concentrations for their application.

*Positive control:* HeLa cell lysate.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one (1) year at 4°C. Precipitation may occur upon freezing and thawing.

*For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.*