

## Anti-Hsc70/Hsp73 Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 11119 (clone 1F2-H5)  
**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. When cells are subjected to metabolic stress, Hsp70 is expressed. Hsp70 shares >90% sequence homology with Hsc70. Constitutively expressed Hsc70 forms a stable complex with the highly inducible Hsp70 in cells following heat shock. This interaction is regulated by ATP. Research on Hsc70 suggests that it plays a role in facilitating the recovery of centrosomal structure and function after heat shock.

### SPECIFICATION SUMMARY

**Antigen:** Human Hsc70  
**Host Species:** Mouse  
**Antibody Class:** IgG2a  
**Preservatives:** None. Available on request.

### SPECIFICITY

This antibody recognizes human, mouse, and rat Hsc70. Other species have not been tested. It does not cross-react with Hsp70.

### APPLICATIONS

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

*ELISA:* use at 1-10ug/ml

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

*Immunoprecipitation:* 1-10ug/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 -20°C. Avoid repeated freezing and thawing.

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