

## Anti-Hsp70 Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 11096 (clone C92F3A-5)

**Size:** 100µg in PBS, pH 7.4, 50% glycerol, 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:** Human Hsp70 purified from HeLa cells.

**Host Species:** Mouse

**Antibody Class:** IgG1

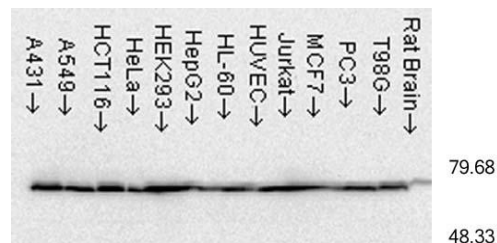
**Preservatives:** 0.1% sodium azide.

### SPECIFICITY

This antibody recognizes Hsp70 of human, mouse, rat, rabbit, monkey, guinea pig, hamster, chicken, bovine, canine, ovine, porcine, fish, *Drosophila*, and *C. elegans* and does not cross-react with Hsc70. The epitope is in the region of amino acids 436-503 of human Hsp70.

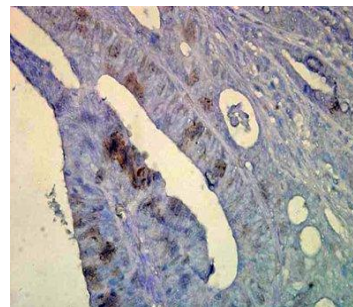
### APPLICATIONS

**Immunoblotting:** 1ug/ml. A band of 70kDa is detected.



Immunoblotting of Hsp70 in cell lysates from human cancer cell lines with #11096.

**Immunohistochemistry:** 1-10ug/ml



Immunohistochemical staining of inflammatory cells in human colon tissue with #11096.

**Immunoprecipitation:** 1-10ug/ml

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

**Flow cytometry:** 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 multiple freeze-thaw cycles.