

# 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 heatshock 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 Cterminus 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.





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  $-20^{\circ}$ C.

Products are for research use only. Not for use in diagnostic or therapeutic procedures. QED Bioscience, Inc. 410 Axminister Dr, St. Louis, MO 63026