

Anti-Hsp70 Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 11116 (clone 2A4)

Size: 100ug PEG-purified antibody in PBS, pH 7.4 and 50% glycerol.

BACKGROUND

Hsp70 binds ATP with high affinity and possesses a weak ATPase activity which can be stimulated by binding to unfolded proteins and synthetic peptides. Hsp70 recognizes and binds to nascent polypeptide chains as well as partially folded intermediates of proteins preventing their aggregation and misfolding. The binding of ATP triggers a critical conformational change leading to the release of the bound protein. The ability of Hsp70 to undergo cycles of binding and release from hydrophobic stretches of partially unfolded proteins is the basis for their role in a variety of intracellular functions such as protein synthesis, protein folding and oligomerization and protein transport.

SPECIFICATION SUMMARY

Antigen: Recombinant human Hsp70 expressed in *E. coli*.

Host Species: Mouse

Subclass: IgM

Preservatives: 0.09% sodium azide

SPECIFICITY

This antibody recognizes human, mouse, fish, rat, avian, amphibian, *Drosophila*, and yeast Hsp70, Hsc70, and, following heat shock, Hsp72.

APPLICATIONS

Immunoblotting: use at 0.2ug/ml (ECL). A band of ~70 kDa is detected.

Immunofluorescence: use at 10ug/ml
Immunohistochemistry/Immunocytochemistry: use at 10ug/ml

User should determine optimal concentrations for their applications.

Positive control: Heat-shocked 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.

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