

## Anti-Hsp27 Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 11120 (clone 5D12.A12)  
**Size:** 100ug in PBS, pH 7.4, purified by Protein G affinity chromatography.

### BACKGROUND

Hsp27 is an important heat shock protein found in normal and malignant human cells. The basic structure of most Hsps is a highly conserved amino acid sequence with an  $\alpha$ -crystallin domain at the C-terminus and WD/EPF domain at the less conserved N-terminus. The N-terminus is essential for formation of high molecular weight oligomers. Hsp27 oligomers are formed by as many as 8-40 Hsp 27 monomers. The degree of oligomerization is associated with chaperone activity: large oligomers have high chaperone activity, whereas dimers have no chaperone activity. Hsp27 is localized in the cytoplasm of unstressed cells but can redistribute to the nucleus in response to stress where it may function to stabilize DNA and/or the nuclear membrane. Hsp27 is also involved in the apoptotic signaling pathway because it interferes with activation of cytochrome C / Apaf-1 / dATP complex, thereby inhibiting activation of procaspase-9.

### SPECIFICATION SUMMARY

**Antigen:** Human Hsp27  
**Host Species:** Mouse  
**Antibody Class:** IgG2b  
**Preservatives:** None

### SPECIFICITY

This antibody recognizes human Hsp27.

### APPLICATIONS

*Immunoblotting:* use at 0.5-1ug/ml. A band of 27 kDa is detected.

*ELISA:* use at 1ug/ml.

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

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

*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.*