

# Hsp70 Monoclonal Antibody

<b>CATALOG #:</b>	3096-100
<b>AMOUNT:</b>	100 µg
<b>LOT #:</b>	_____
<b>ISOTYPE:</b>	Mouse IgG <sub>1</sub>
<b>CLONE:</b>	S5
<b>SPECIES REACTIVITY:</b>	human, mouse, rat, monkey, bovine, rabbit, hamster, guinea pig, dog, sheep, chicken, pig

**ANTIBODY FORMULATION:**

100 µg (0.5 mg/ml) in PBS containing 1 mg/ml BSA and 1.5 mM sodium azide and 50% glycerol.

**STORAGE CONDITIONS:**

Store at -20°C. For long term storage, aliquot and refreeze at -70°C. Avoid repeated freeze/thaw cycles.

**BACKGROUND DESCRIPTION:**

Hsp70, one class of stress proteins, is comprised of multiple members, all of which bind ATP in vitro, but are localized within different intracellular compartments. These include: a) the constitutive Hsc70 (or cognate) present within the cytosol/nucleus; b) the highly stress-inducible Hsp70 present within the cytosol/ nucleus/nucleolus; c) the constitutive glucose regulated 78 kDa (or BiP) protein present within the lumen of the endoplasmic reticulum; and d) the glucose regulated 75 kDa protein present within the mitochondria. Hsp70 is typically not expressed in the cell under normal growth conditions, but is expressed at high levels in the cell experiencing stress. Consequently, detection of Hsp70 using an antibody specific for the inducible form is quite useful in ascertaining whether a stress response has occurred in the cell.

**APPLICATIONS AND USAGE:**

The antibody can be used in Western blot analysis (1 µg/ml), immunoprecipitation (5-10 µg/ml), immunohistochemistry (5-20 µg/ml, frozen & paraffin), and FACS analysis. However, the optimal conditions should be determined individually.

**SPECIFICITY:**

The antibody recognizes a 70 kDa protein, corresponding to the apparent molecular weight of the inducible Hsp70 on SDS-PAGE immunoblots. This antibody has no reactivity with the constitutive Hsc70 (Hsp73).

**NOTE:** For Research Purpose Only! Not to be used in human

**RELATED PRODUCTS:**

## Apoptosis Detection Kits &amp; Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

## Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

## Cell Proliferation &amp; Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

## Cell Damage &amp; Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

## Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

## Adipocyte &amp; Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

## Molecular Biology &amp; Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

## Growth Factors and Cytokines

Monoclonal and Polyclonal Antibodies