

## Hsp70 Polyclonal Antibody

<b>CATALOG NO:</b>	3097-30T      30 µg (Trial size) 3097-100      100 µg
<b>HOST:</b>	Rabbit
<b>IMMUNOGEN:</b>	Synthetic peptide surrounding amino acid 559 of human Hsp70 (ID# BV-353-354).
<b>SPECIES REACTIVITY:</b>	Human, Mouse, Rat, Bovine, Chicken, Rabbit, Monkey, Hamster, Dog, Pig

**FORMULATION:**

0.5 mg/ml in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 1% BSA, 0.02% thimerosal.

**STORAGE CONDITIONS:**

Store at -20°C. For long-term storage, aliquot and freeze 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. It should be noted, however, that there is a constitutive level of Hsp70 expression in some cell types such as primates, e.g., human and monkey. Nevertheless increased expression of Hsp70 is observed in such cells following stress.

**SPECIFICITY:**

The antibody is specific for the inducible form of Hsp70 (Hsp72) and does not cross-react with the constitutive Hsc70 (Hsc73).

**APPLICATION AND USAGE:**

The antibody performs well on Western blot analysis (1-2 µg/ml). However, the optimal conditions should be determined individually.

**FOR RESEARCH USE ONLY! Not to be used on humans.**

**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