

Hsp27 Polyclonal Antibody

CATALOG #: 3092-100

AMOUNT: 100 µg

LOT #: _____

FORMULATION:

100 µg (200 µg/ml) in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% thimerosal.

SPECIES REACTIVITY: human, monkey

STORAGE CONDITIONS:

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

BACKGROUND DESCRIPTION:

Human Hsp27, mouse Hsp25 and $\alpha\beta$ -crystallin are part of a diverse family of small heat shock proteins which are produced in all organisms. They function as chaperone-like proteins by binding unfolded polypeptides and preventing uncontrolled protein aggregation. Hsp27 is believed to exist mainly as oligomers of as many as 8-40 Hsp27 protein monomers in cells and data suggests that the large oligomers of Hsp27 have a chaperone-like activity by serving as a site where unfolding proteins may bind until ATP and Hsp70-dependent refolding can occur. Hsp27 is believed to protect cells by enhancing cellular glutathione levels and elevated glutathione levels have been measured in cells overexpressing hsp27. Data from studies using wild-type Hsp27 and mutant forms in which the serine phosphorylation sites were mutated to alanines, glycines or aspartates, have shown that cellular glutathione levels depend on the oligomerization of Hsp27. Recent findings indicate that Hsp27 is also a negative regulator of cytochrome c-dependent activation of procaspase-3.

SPECIFICITY:

The antibody detects a 27 kDa protein, corresponding to the apparent molecular mass of Hsp27 on SDS-PAGE immunoblots, in samples from human, monkey, dog (weakly) and pig (weakly) origins.

APPLICATION AND USAGE:

The antibody can be used in Western blotting (1-2 µg/ml), immunoprecipitation (5-10 µg/ml), immunocytochemistry (10-15 µg/ml), and ELISA (1 µg/ml). However, the optimal conditions should be determined individually.

RELATED PRODUCTS:

Apoptosis Detection Kits & 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 & 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 & 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 & Lipid Transfer

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

Molecular Biology & 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