

AM00172PU-N

Monoclonal Antibody to Heat shock protein 70 / HSP70 - Purified

Alternate names:	HSP70-1/HSP70-2, HSP70.1, HSPA1, HSPA1A, HSPA1B, Heat shock 70 kDa protein 1A/1B
Quantity:	0.1 mg
Concentration:	0.5 mg/ml
Background:	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.
Uniprot ID:	P08107
NCBI:	NP_005336
GeneID:	3303
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N
Clone:	S5
Immunogen:	Recombinant Human Hsp70
Format:	State: Liquid purified Ig fraction Purification: Affinity Chromatography Buffer System: PBS Preservatives: 1.5 mM Sodium Azide Stabilizers: 1 mg/ml BSA, 50% Glycerol
Applications:	Western blot (1 µg/ml). Immunoprecipitation (5-10 µg/ml). FACS Analysis. Immunohistochemistry on Frozen and Paraffin Embedded Sections (5-20 µg/ml). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

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).

Species: Human, Mouse, Rat, Monkey, Bovine, Rabbit, Hamster, Guinea Pig, Dog, Sheep, Chicken and Pig.

Other species not tested.

Storage:

Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.