

**Hsp70 Antibody (Clone S5)**  
**Mouse Monoclonal Antibody**  
**Catalog # ABV10073****Specification**

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**Hsp70 Antibody (Clone S5) - Product Information**

Application	WB, IHC, IP
Primary Accession	<a href="#">P34932</a>
Other Accession	<a href="#">AAA02807</a>
Reactivity	Human, Mouse, Rat, Rabbit, Hamster, Monkey, Bovine
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	94331

**Hsp70 Antibody (Clone S5) - Additional Information****Gene ID 3308**

Application & Usage	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. 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).
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**Other Names**

Heat shock 70 kDa protein 4, HSP70RY, Heat shock 70-related protein APG-2, HSPA4, APG2

**Target/Specificity**

Hsp70

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

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

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

Hsp70 Antibody (Clone S5) is for research use only and not for use in diagnostic or therapeutic procedures.

**Hsp70 Antibody (Clone S5) - Protein Information**

**Name** HSPA4

**Synonyms** APG2

**Cellular Location**

Cytoplasm.

**Hsp70 Antibody (Clone S5) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Hsp70 Antibody (Clone S5) - Images****Hsp70 Antibody (Clone S5) - 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.