

## Product datasheet

# Anti-Hsp70 antibody [C92F3A-5] ab47455

★★★★☆ 3 Abreviews 37 References 5 Images

### Overview

<b>Product name</b>	Anti-Hsp70 antibody [C92F3A-5]
<b>Description</b>	Mouse monoclonal [C92F3A-5] to Hsp70
<b>Host species</b>	Mouse
<b>Specificity</b>	Detects a 70kDa protein corresponding to the molecular mass of Hsp70 of SDS PAGE immunoblots. There is no cross-reactivity to Hsc70 (Hsp73).
<b>Tested applications</b>	<b>Suitable for:</b> WB, Flow Cyt, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Cow, Dog, Pig, Caenorhabditis elegans, Macaque monkey, Bos mutus grunniens, Saguinus oedipus, Onchocerca volvulus, Oncorhynchus tshawytscha
<b>Immunogen</b>	Recombinant fragment corresponding to Human Hsp70 aa 436-503. Sequence: YSDNQPGVLIQVYEGERAMTKDNNLLGRFELSGIPPAPRG VPQIEVTFDI DANGILNVTATDKSTGKANKITI  Database link: <a href="#">P08107</a>  <a href="#">Run BLAST with</a> <a href="#">Run BLAST with</a>
<b>Epitope</b>	The mapped epitope is in the region of amino acid residues 436-503.
<b>Positive control</b>	WB: HeLa, A431, A549, HCT116, HEK293, HepG2, HL-60, HUVEC, Jurkat, MCF7, PC3, T98G cell lysates; Rat Brain tumour lysate; Rat bone lysate. IHC-P: Mouse colon cancer tissue; human colon cancer tissue. Flow cyt: Heat Shocked CD3+ CD8+ T cells
<b>General notes</b>	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.  If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

### Properties

**Form** Liquid

<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.1% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine)
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	C92F3A-5
<b>Isotype</b>	IgG1

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab47455 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

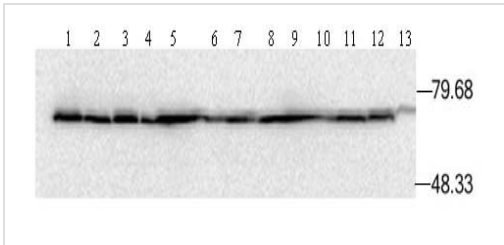
Application	Abreviews	Notes
WB	★★★★★ (3)	1/1000. Predicted molecular weight: 70 kDa.
Flow Cyt		1/1000. <a href="#">ab170190</a> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P		1/10000.

## Target

**Relevance** Function: In cooperation with other chaperones, the Hsp70 family stabilize preexistent proteins against aggregation and mediate the folding of newly translated polypeptides in the cytosol as well as within organelles. These chaperones participate in all these processes through their ability to recognize nonnative conformations of other proteins. They bind extended peptide segments with a net hydrophobic character exposed by polypeptides during translation and membrane translocation, or following stress-induced damage. In case of rotavirus A infection, serves as a post-attachment receptor for the virus to facilitate entry into the cell. Tissue specificity: HSPA1B is testis-specific.

**Cellular localization** Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

## Images



Western blot - Anti-Hsp70 antibody [C92F3A-5] (ab47455)

**All lanes :** Anti-Hsp70 antibody [C92F3A-5] (ab47455) at 1 µg/ml

**Lane 1 :** Cell lysate prepared from human A431 cell line

**Lane 2 :** Cell lysate prepared from human A549 cell line

**Lane 3 :** Cell lysate prepared from human HCT116 cells line

**Lane 4 :** Cell lysate prepared from human Hela cell line

**Lane 5 :** Cell lysate prepared from human HEK293 cell line

**Lane 6 :** Cell lysate prepared from human HepG2 cell line

**Lane 7 :** Cell lysate prepared from human HL-60 cell line

**Lane 8 :** Cell lysate prepared from human HUVEC cell line

**Lane 9 :** Cell lysate prepared from human Jurkat cell line

**Lane 10 :** Cell lysate prepared from human MCF7 cell line

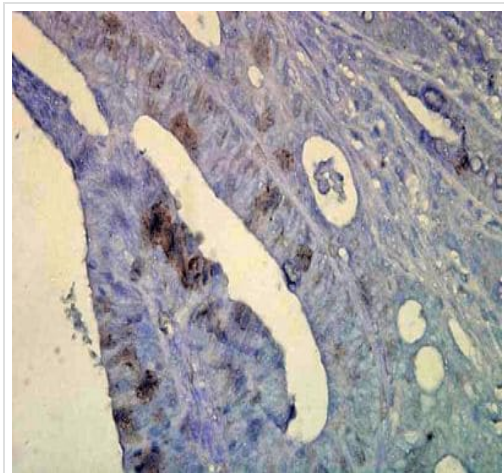
**Lane 11 :** Cell lysate prepared from human PC3 cell line

**Lane 12 :** Cell lysate prepared from human T98G cell line

**Lane 13 :** Rat brain tissue lysates

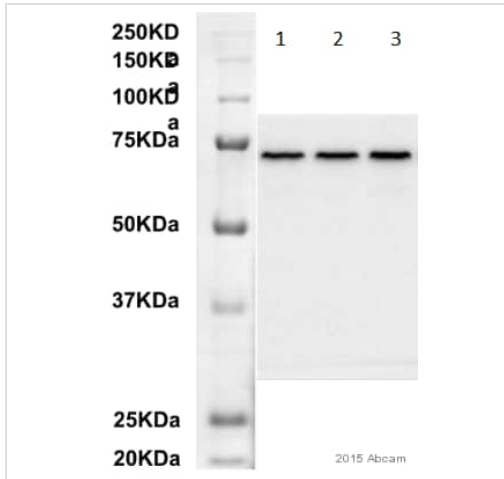
**Predicted band size:** 70 kDa

All are cancer cell lines.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp70 antibody [C92F3A-5] (ab47455)

Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for Hsp70 using ab47455 at 1/1000 dilution in immunohistochemical analysis. Counter stained with hematoxylin.



Western blot - Anti-Hsp70 antibody [C92F3A-5] (ab47455)

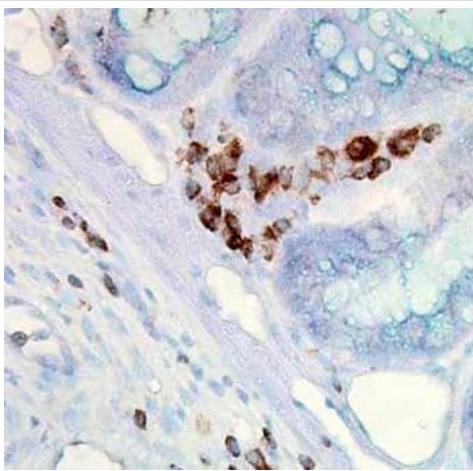
Image courtesy of an anonymous AbReview

**All lanes :** Anti-Hsp70 antibody [C92F3A-5] (ab47455) at 1/500 dilution

**All lanes :** Rat bone (tibia) whole cell lysate

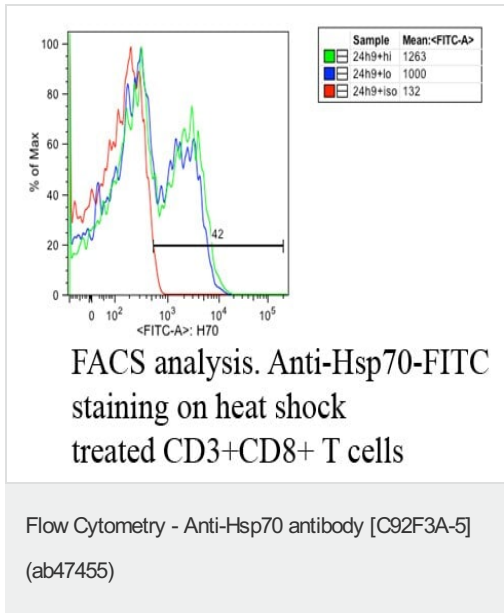
Lysates/proteins at 50 µg per lane.

**Predicted band size:** 70 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp70 antibody [C92F3A-5] (ab47455)

ab47455 staining Hsp70 in mouse colon cancer tissue section by Immunohistochemistry (Bouin's fixed paraffin embedded tissue sections). The primary antibody was diluted at 1/100,000. A Fluorophore conjugated goat anti mouse was used as secondary. An antibody amplifier™ system was used for staining.



FACS analysis using ab47455 staining heat shock treated CD3 + CD8 + T cells.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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