


Product datasheet

Anti-Hsp70 antibody ab124208

3 Images

Overview

Product name	Anti-Hsp70 antibody
Description	Rabbit polyclonal to Hsp70
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Rat, Human Predicted to work with: Rabbit, Cow, Dog, Pig, Chimpanzee, Gorilla, Orangutan 
Immunogen	Synthetic peptide corresponding to Human Hsp70 aa 50-150 conjugated to keyhole limpet haemocyanin. (Peptide available as ab124300)
Positive control	This antibody gave a positive signal in rat liver, kidney and brain tissue lysates, and in the following whole cell lysates: HeLa; Jurkat; HEK293; HepG2; A431; HUVEC; PC3; PC12.
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab124208 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

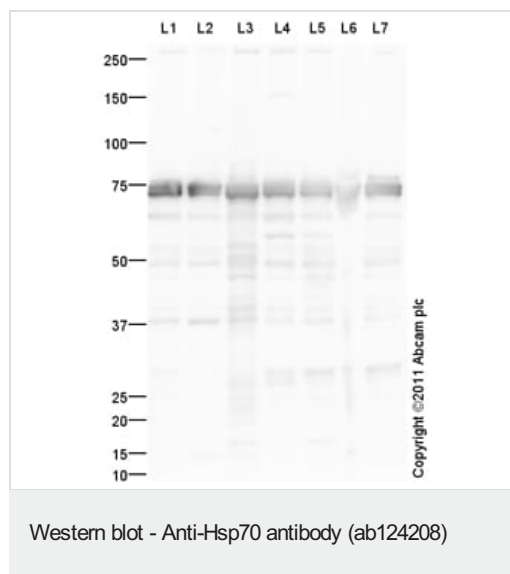
Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 73 kDa (predicted molecular weight: 70 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

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



All lanes : Anti-Hsp70 antibody (ab124208) at 1 µg/ml

- Lane 1** : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate
- Lane 2** : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate
- Lane 3** : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate
- Lane 4** : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate
- Lane 5** : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate
- Lane 6** : HUVEC (Human Umbilical Vein Endothelial Cell) Whole Cell Lysate

Lane 7 : PC3 (Human prostate carcinoma cell line) Whole Cell
Lysate Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed
(**ab97080**) at 1/5000 dilution

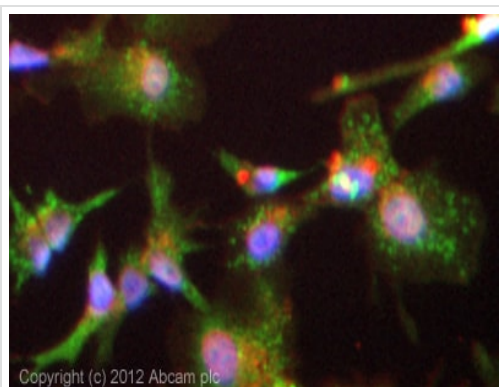
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 70 kDa

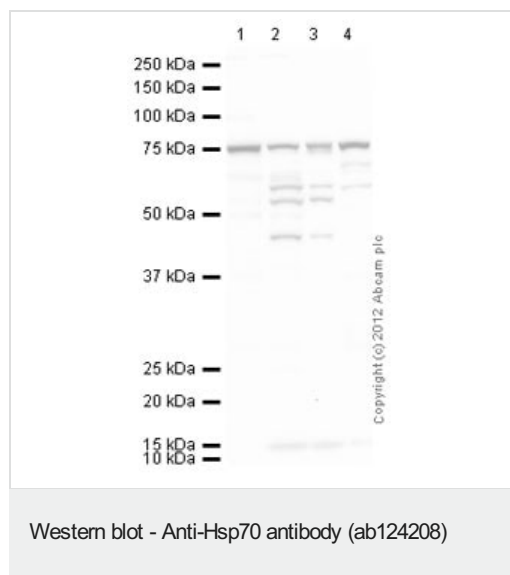
Observed band size: 73 kDa

Exposure time: 1 minute



Immunocytochemistry/ Immunofluorescence - Anti-
Hsp70 antibody (ab124208)

ICC/IF image of ab124208 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab124208, 5µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



All lanes : Anti-Hsp70 antibody (ab124208) at 1 µg/ml

Lane 1 : PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

Lane 2 : Liver (Rat) Tissue Lysate

Lane 3 : Kidney (Rat) Tissue Lysate

Lane 4 : Brain (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 70 kDa

Observed band size: 75 kDa

Additional bands at: 46 kDa, 55 kDa, 60 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 30 seconds

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

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