

Product datasheet

Anti-Hsp70 antibody [EPR16893] - BSA and Azide free ab238947

Recombinant RabMAb

4 Images

Overview

Product name	Anti-Hsp70 antibody [EPR16893] - BSA and Azide free
Description	Rabbit monoclonal [EPR16893] to Hsp70 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, WB, ICC/IF, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment within Mouse Hsp70 aa 1-250. The exact sequence is proprietary. (P17879). Database link: Q61696
Positive control	IHC-P: Mouse kidney tissue.
General notes	<p>Ab238947 is the carrier-free version of ab194360. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>ab238947 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. <i>Maxpar® is a trademark of Fluidigm Canada Inc.</i></p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next</p>

breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR16893
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab238947** 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
Flow Cyt		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 70 kDa (predicted molecular weight: 70 kDa).
ICC/IF		Use at an assay dependent concentration.

Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

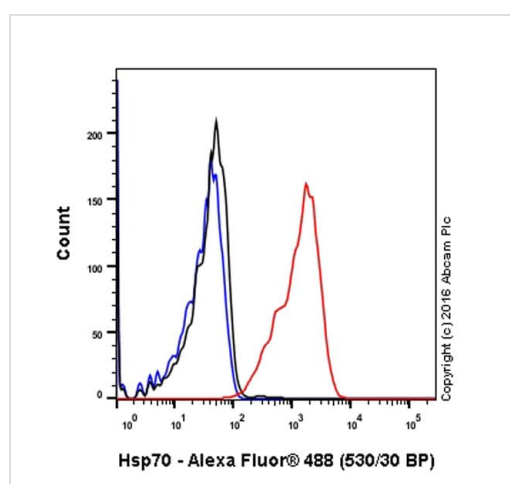
Relevance

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.

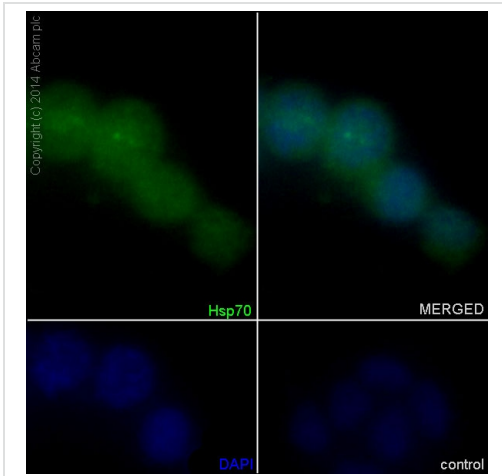
Images



Flow cytometry analysis of HeLa cells labelling Hsp70 (red) with purified [ab194360](#) at dilution of 1/120. The secondary antibody used was Alexa Fluor[®] 488 goat-anti-rabbit IgG (1/2000). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Isotype control antibody was Rabbit monoclonal IgG (black). The blue line shows cells without incubation with primary antibody and secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab194360](#)).

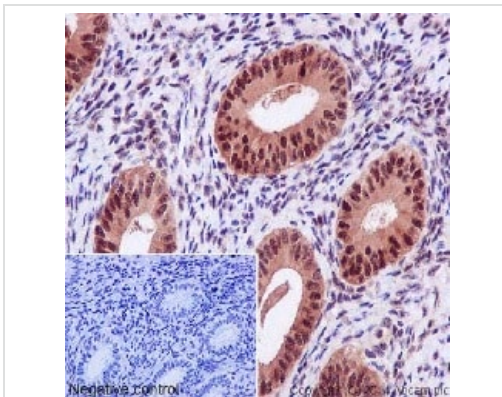
Flow Cytometry - Anti-Hsp70 antibody [EPR16893] - BSA and Azide free ([ab238947](#))



Immunocytochemistry/ Immunofluorescence - Anti-Hsp70 antibody [EPR16893] - BSA and Azide free (ab238947)

Immunofluorescent analysis of A431 cells (4% Paraformaldehyde-fixed, 0.1% tritonX-100 permeabilized) labeling Hsp70 with [ab194360](#) at 1/150 dilution (11 µg/mL) followed by Goat anti rabbit IgG (AlexaFluor® 488) ([ab150077](#)) secondary at 1/400 dilution and counter-stained with DAPI (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab194360](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp70 antibody [EPR16893] - BSA and Azide free (ab238947)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling Hsp70 with [ab194360](#) at 1/1000 (1.67µg/mL) dilution followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution and counter-stained with Hematoxylin. (inset: negative control).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab194360](#)).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Hsp70 antibody [EPR16893] - BSA and Azide free (ab238947)

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

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