

### Anti-Hsp70 antibody [3A3] ab5439

リコンビナント

★★★★★ **3 Abreviews** **57 References** 画像数 9

#### 製品の概要

製品名	Anti-Hsp70 antibody [3A3]
製品の詳細	Mouse monoclonal [3A3] to Hsp70
由来種	Mouse
特異性	This antibody detects several members of the heat shock protein 70 kDa (Hsp 70) gene family including Hsp 70, Hsc 70, p75, and following heat shock, Hsp 72 from yeast, Drosophila, fish, mouse, avian, amphibian and human samples.
アプリケーション	<b>適用あり:</b> ICC/IF, IHC-P, WB
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Recombinant fragment corresponding to Human Hsp70 aa 504-617 (C terminal).
エピトープ	Epitope mapping with a panel of Hsp 70 deletion mutants suggests that the epitope recognized is located between amino acids 504-617 of human Hsp 70, a region that has been shown to be involved in stress-induced nucleolar localization.
ポジティブ・コントロール	WB: HeLa, K562, Jurkat, 293T, A431, A549, F9, RAW264.7 and C6, PC-12 lysates. IHC-P: Human cerebrum and lung carcinoma, Mouse testis, Rat cerebrum tissues. ICC/IF: HeLa and NIH/3T3, PC-12 cells.
特記事項	<p>This product has switched from a hybridoma to recombinant production method on 08th March 2021.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.01% Sodium azide

精製度	Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
一次抗体 備考	Protein A purified
	The Hsp 70 family is a set of highly conserved proteins that are induced by a variety of biological stresses, including heat stress, in every organism in which the proteins have been examined. The human Hsp 70 family members include: Hsp 70, a protein which is strongly inducible in all organisms but which is also constitutively expressed in primate cells; Hsp 72, a 72 kDa protein that is induced exclusively under stress conditions; Hsc 70, or cognate protein, is a 72 kDa, constitutively expressed, protein which is involved in the uncoating of clathrin coated vesicles; GRP78, or BiP, is a glucose regulated 78 kDa protein localized in the endoplasmic reticulum; and p75, or Hsp 75, a 75 kDa protein that is found within the mitochondria.
ポリ/モノ	モノクローナル
クローン名	3A3
アイソタイプ	IgG1

## アプリケーション

**The Abpromise guarantee**      **Abpromise保証は、次のテスト済みアプリケーションにおけるab5439の使用に適用されます**  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

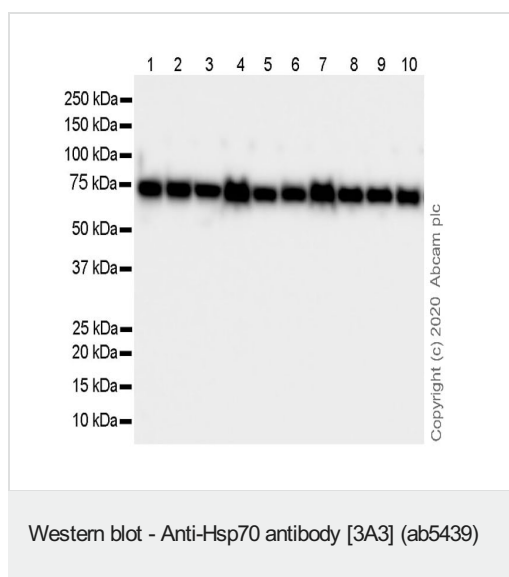
アプリケーション	Abreviews	特記事項
ICC/IF		1/50.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	★★★★★ (3)	1/1000. Predicted molecular weight: 70-78 kDa.

## ターゲット情報

**関連性**      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.

**細胞内局在**      Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

## 画像



**All lanes :** Anti-Hsp70 antibody [3A3] (ab5439) at 1/1000 dilution

**Lane 1 :** HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate

**Lane 2 :** K562 (human chronic myelogenous leukemia lymphoblast), whole cell lysate

**Lane 3 :** Jurkat (human T cell leukemia T lymphocyte), whole cell lysate

**Lane 4 :** 293T (human embryonic kidney epithelial cell), whole cell lysate

**Lane 5 :** A431 (human epidermoid carcinoma epithelial cell), whole cell lysate

**Lane 6 :** A549 (human lung carcinoma epithelial cell), whole cell lysate

**Lane 7 :** F9 (mouse embryonal carcinoma epithelial cell), whole cell lysate

**Lane 8 :** RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage), whole cell lysate

**Lane 9 :** C6 (rat glial tumor glial cell), whole cell lysate

**Lane 10 :** PC-12 (rat adrenal gland pheochromocytoma), whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

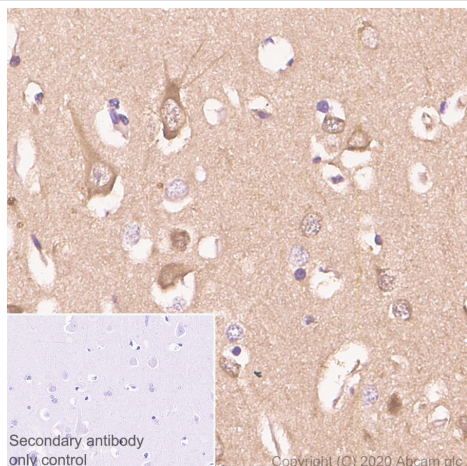
**All lanes :** Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution

**Predicted band size:** 70-78 kDa

**Observed band size:** 70 kDa

**Exposure time:** 1 second

Blocking/Diluting buffer and concentration: 5% NFDM/TBST

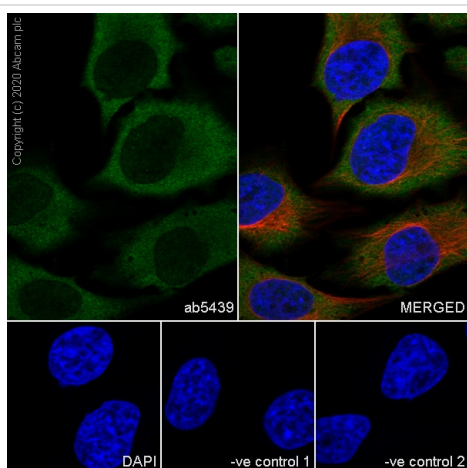


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp70 antibody [3A3] (ab5439)

Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labeling Hsp70 with ab5439 at 1/2000 (0.519 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human cerebrum. The section was incubated with ab5439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

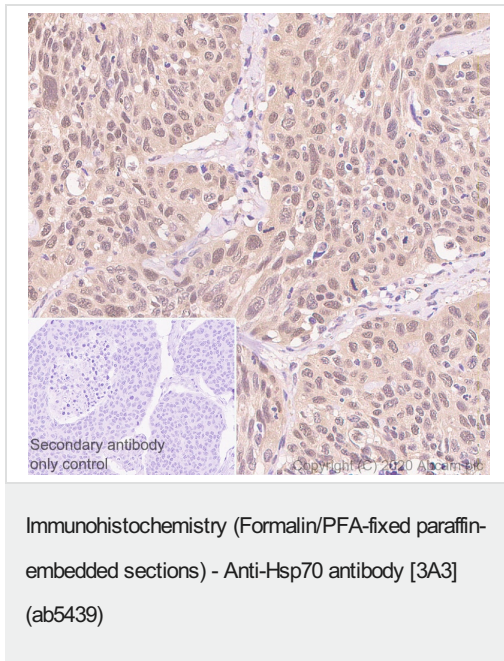
Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunocytochemistry/ Immunofluorescence - Anti-Hsp70 antibody [3A3] (ab5439)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa cells labelling Hsp70 with ab5439 at 1/50 (20.76 µg/ml) dilution, followed by **ab150113** Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic and weak nuclear staining in HeLa cells **ab179513** Anti-beta Tubulin rabbit monoclonal antibody was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

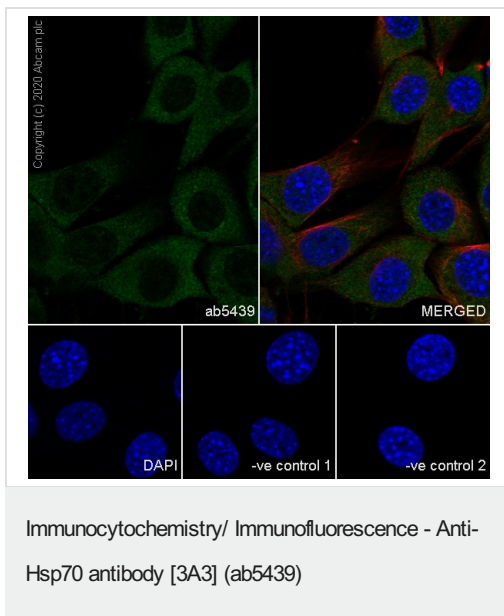
Secondary antibody only control: Secondary antibody is **ab150113** Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Immunohistochemical analysis of paraffin-embedded Human lung carcinoma tissue labeling Hsp70 with ab5439 at 1/2000 (0.519 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on human lung carcinoma. The section was incubated with ab5439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

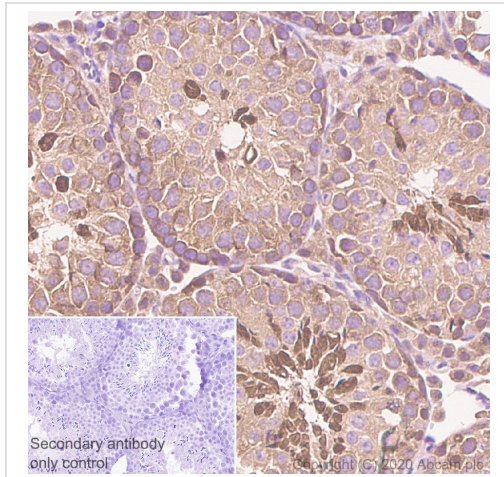
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized NIH/3T3 cells labelling Hsp70 with ab5439 at 1/50 (20.76 µg/ml) dilution, followed by **ab150113** Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic and weak nuclear staining in NIH/3T3 cells **ab179513** Anti-beta Tubulin rabbit monoclonal antibody was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150113** Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.

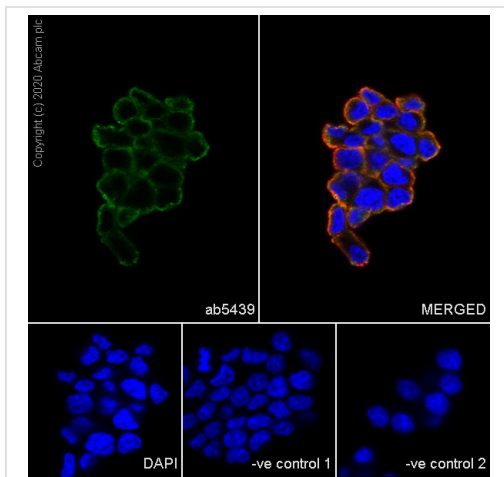


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp70 antibody [3A3] (ab5439)

Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling Hsp70 with ab5439 at 1/2000 (0.519 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on mouse testis. The section was incubated with ab5439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

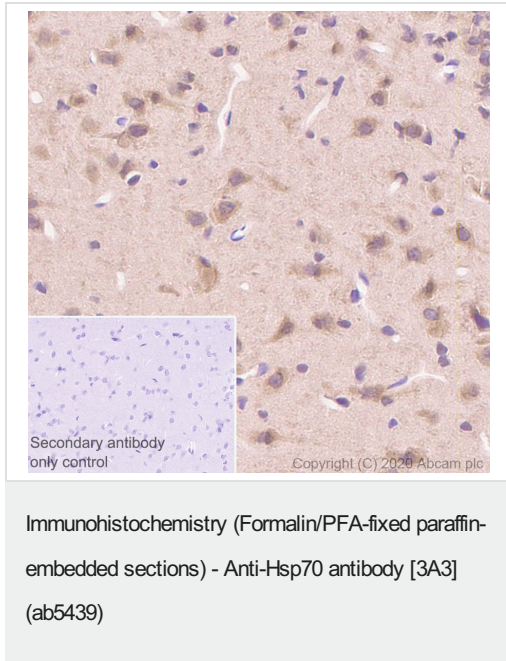


Immunocytochemistry/ Immunofluorescence - Anti-Hsp70 antibody [3A3] (ab5439)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized PC-12 cells labelling Hsp70 with ab5439 at 1/50 (20.76 µg/ml) dilution, followed by **ab150113** Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in PC-12 cells **ab179513** Anti-beta Tubulin rabbit monoclonal antibody was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150113** Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.









Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling Hsp70 with ab5439 at 1/2000 (0.519 µg/ml) dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on rat cerebrum. The section was incubated with ab5439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-Hsp70 antibody [3A3] (ab5439)

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