abcam

Product datasheet

Anti-Hsp70 antibody [EPR17677] ab182844



重组 RabMAb

1 References 11 图像

概述

产品名称 Anti-Hsp70抗体[EPR17677]

描述 兔单克隆抗体[EPR17677] to Hsp70

宿主 Rabbit

适用于: Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP 经测试应用

种属反应性 与反应: Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: HeLa, A431 and K562 whole cell lysates; Human fetal brain, fetal heart and fetal kidney

> lysates. MCF7 whole cell lysate heat shock (43°C) treated for 1-6 hours. IHC-P: Human breast, prostate, lung squamous cell carcinoma and transitional cell carcinoma of bladder tissues. ICC/IF:

HeLa cells. Flow Cyt (intra): HeLa cells. IP: HeLa whole cell extract.

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity - Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 **EPR17677**

同种型 lgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab182844于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/30. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000. Detects a band of approximately 70 kDa (predicted molecular weight: 70 kDa).
IHC-P		1/400. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.
IP		1/30.

靶标

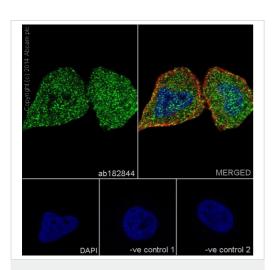
相关性

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.

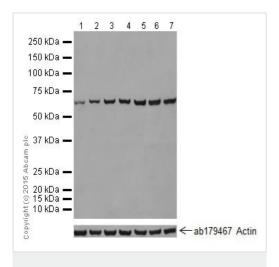
细胞定位

Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs.

图片



Immunocytochemistry/ Immunofluorescence - Anti-Hsp70 antibody [EPR17677] (ab182844)



Western blot - Anti-Hsp70 antibody [EPR17677] (ab182844)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa cells (Human epithelial cells from cervix adenocarcinoma) labeling Hsp70 with ab182844 at 1/100 dilution, followed by Alexa Fluor®488 Goat Anti-Rabbit lgG H&L (ab150077) secondary antibody at 1/500 dilution (green). Confocal image showing both cytoplasmic and nuclear staining on HeLa cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab182844 at 1/100 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/500 dilution.

All lanes : Anti-Hsp70 antibody [EPR17677] (ab182844) at 1/50000 dilution

Lane 1 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate untreated at 37°C

Lane 2 : MCF7 whole cell lysate heat shock (43°C) treated for 1 hour

Lane 3: MCF7 whole cell lysate heat shock (43°C) treated for 2 hours

Lane 4: MCF7 whole cell lysate heat shock (43°C) treated for 3 hours

Lane 5 : MCF7 whole cell lysate heat shock (43°C) treated for 4 hours

Lane 6: MCF7 whole cell lysate heat shock (43°C) treated for 5 hours

Lane 7: MCF7 whole cell lysate heat shock (43°C) treated for 6 hours

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 70 kDa **Observed band size:** 70 kDa

Exposure time: 30 seconds

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

1 2 3
250 kDa —
150 kDa —
100 kDa —
75 kDa —
37 kDa —
25 kDa —
20 kDa —
20 kDa —
15 kDa —
10 kDa —
110 kDa —
110 kDa —

Western blot - Anti-Hsp70 antibody [EPR17677] (ab182844)

All lanes : Anti-Hsp70 antibody [EPR17677] (ab182844) at 1/5000 dilution

Lane 1 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

Lane 2 : A431 (Human epidermoid carcinoma) whole cell lysateLane 3 : K562 (Human chronic myelogenous leukemia cells from bone marrow) whole cell lysate

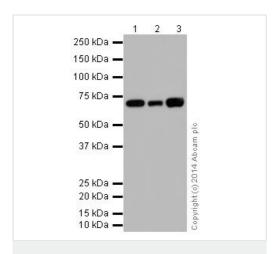
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/1000 dilution

Predicted band size: 70 kDa **Observed band size:** 70 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Hsp70 antibody [EPR17677] (ab182844)

All lanes : Anti-Hsp70 antibody [EPR17677] (ab182844) at 1/1000 dilution

Lane 1 : Human fetal brain lysate

Lane 2 : Human fetal heart lysate

Lane 3 : Human fetal kidney lysate

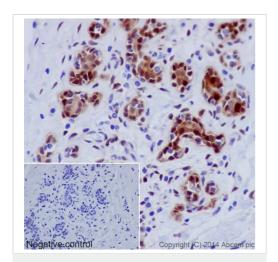
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Anti-Rabbit $\lg G$ (HRP), specific to the non-reduced form of $\lg G$ at 1/1000 dilution

Predicted band size: 70 kDa **Observed band size:** 70 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

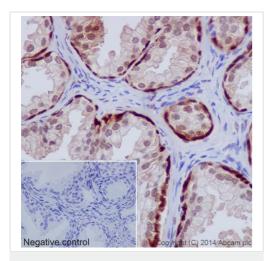


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Hsp70 antibody
[EPR17677] (ab182844)

Immunohistochemical analysis of paraffin-embedded Human breast tissue labeling Hsp70 with ab182844 at 1/400 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear and cytoplasmic staining on epithelial cells of Human mammary glands is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution.

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

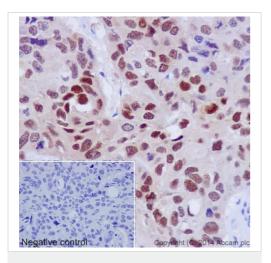


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Hsp70 antibody
[EPR17677] (ab182844)

Immunohistochemical analysis of paraffin-embedded Human prostate tissue labeling Hsp70 with ab182844 at 1/400 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear and cytoplasmic staining on epithelial cells of Human prostate is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution.

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

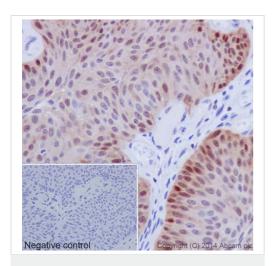


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Hsp70 antibody
[EPR17677] (ab182844)

Immunohistochemical analysis of paraffin-embedded Human lung squamous cell carcinoma tissue labeling Hsp70 with ab182844 at 1/400 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear and cytoplasmic staining on cancer cells of Human lung squamous cell carcinoma is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution.

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

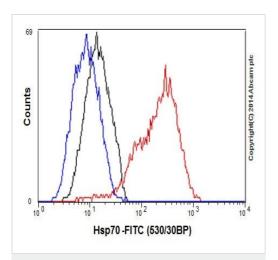


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Hsp70 antibody
[EPR17677] (ab182844)

Immunohistochemical analysis of paraffin-embedded Human transitional cell carcinoma of bladder tissue labeling Hsp70 with ab182844 at 1/400 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear and cytoplasmic staining on cancer cells of Human transitional cell carcinoma of bladder is observed. Counter stained with Hematoxylin.

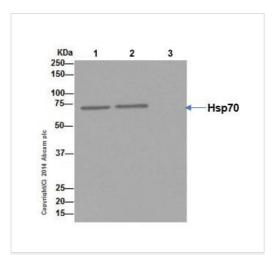
Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

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



Flow Cytometry (Intracellular) - Anti-Hsp70 antibody [EPR17677] (ab182844)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling Hsp70 with ab182844 at 1/30 dilution (red) compared with a rabbit monoclonal IgG isotype control (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-Hsp70 antibody [EPR17677] (ab182844)

Hsp70 was immunoprecipitated from HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell extract with ab182844 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab182844 at 1/1000 dilution. Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: HeLa whole cell extract (Input) 10 µg.

Lane 2: ab182844 IP in HeLa whole cell extract.

Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of ab182844 in HeLa whole cell extract.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.



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