

## Product datasheet

# Anti-Hsp105/HSP110 antibody [EPR4576] ab109624

Recombinant **RabMAb**

★★★★☆ [4 Abreviews](#) [9 References](#) [9 Images](#)

### Overview

<b>Product name</b>	Anti-Hsp105/HSP110 antibody [EPR4576]
<b>Description</b>	Rabbit monoclonal [EPR4576] to Hsp105/HSP110
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: HepG2, MCF-7, HeLa, C6, PC-12 and NIH/3T3 cell lysates and human cerebellum tissue lysate. ICC/IF: HeLa cells. IHC-P: Human thyroid gland carcinoma and liver carcinoma tissues. IP: NIH/3T3 cell lysate.
<b>General notes</b>	<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> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	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. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR4576

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab109624 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	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 97 kDa.
IP	★★★★☆ (1)	1/10 - 1/100.
IHC-P	★★★★☆ (1)	1/50 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .
ICC/IF		1/100 - 1/250.

## Target

### Function

Prevents the aggregation of denatured proteins in cells under severe stress, on which the ATP levels decrease markedly. Inhibits HSPA8/HSC70 ATPase and chaperone activities.

### Tissue specificity

Highly expressed in testis. Present at lower levels in most brain regions, except cerebellum. Overexpressed in cancer cells.

### Sequence similarities

Belongs to the heat shock protein 70 family.

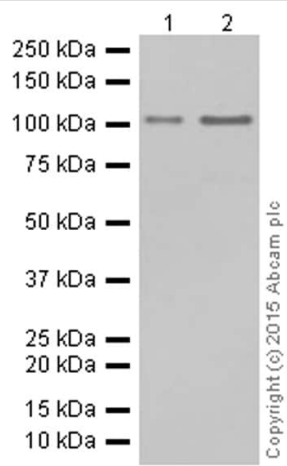
### Post-translational modifications

Phosphorylation on Ser-509 may be important for regulation of the HSPA8/HSC70 chaperone activity.

### Cellular localization

Cytoplasm.

## Images



Western blot - Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624)

**All lanes :** Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624) at 1/5000 dilution (purified)

**Lane 1 :** HeLa whole cell lysate  
**Lane 2 :** HepG2 whole cell lysate

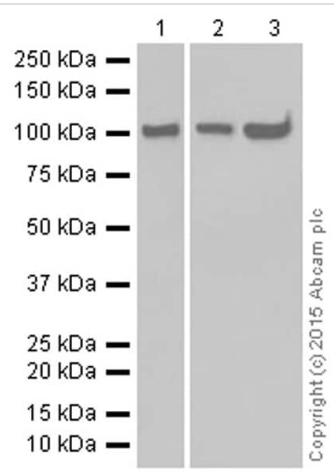
Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG at 1/1000 dilution

**Predicted band size:** 97 kDa  
**Observed band size:** 105 kDa

Blocking and dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624)

**All lanes :** Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624) at 1/5000 dilution (purified)

**Lane 1 :** C6 whole cell lysate  
**Lane 2 :** PC-12 whole cell lysate  
**Lane 3 :** NIH/3T3 whole cell lysate

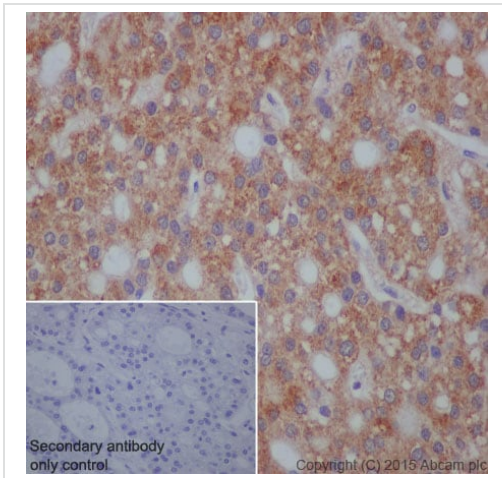
Lysates/proteins at 20 µg per lane.

**Secondary**

**All lanes :** HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG at 1/1000 dilution

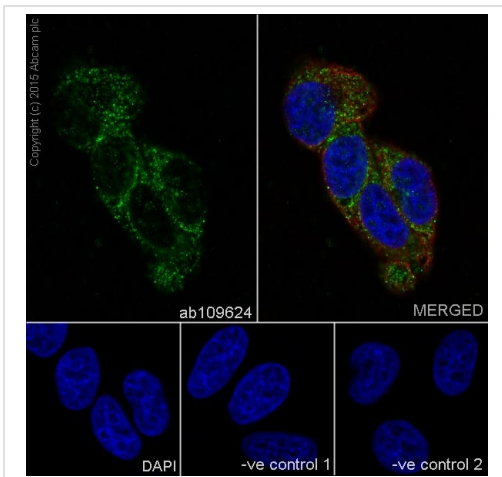
**Predicted band size:** 97 kDa  
**Observed band size:** 105 kDa

Blocking and dilution buffer: 5% NFDm/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver carcinoma tissue labelling Hsp105/HSP110 with purified ab109624 at a dilution of 1/500. Heat mediated antigen retrieval was performed using EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

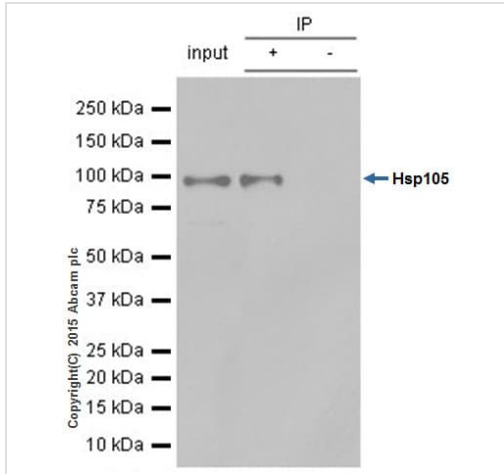


Immunocytochemistry/ Immunofluorescence - Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling Hsp105/HSP110 with purified ab109624 at a dilution of 1/250. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse IgG (1/1000) were also used.

Control 1: primary antibody (1/250) and secondary antibody, **ab150120**, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit IgG (1/1000).



Immunoprecipitation - Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624)

ab109624 (purified) at 1/40 immunoprecipitating Hsp105/HSP110 in NIH/3T3 whole cell lysate.

Lane 1 (input): NIH/3T3 whole cell lysate (10µg)

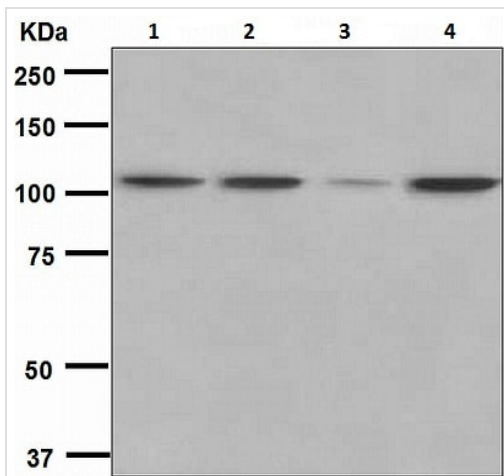
Lane 2 (+): ab109624 + NIH/3T3 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab109624 in NIH/3T3 whole cell lysate.

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/10,000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624)

**All lanes** : Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624) at 1/1000 dilution (unpurified)

**Lane 1** : HeLa cell lysate

**Lane 2** : HepG2 cell lysate

**Lane 3** : Human cerebellum lysate

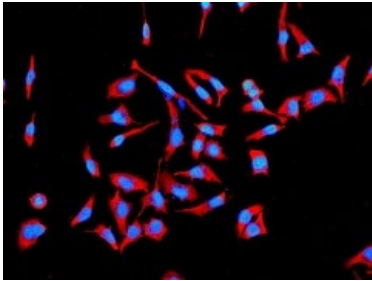
**Lane 4** : MCF-7 cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

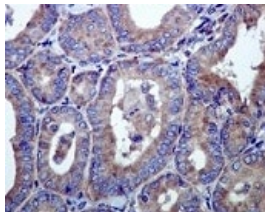
**All lanes** : HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

**Predicted band size:** 97 kDa



Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling Hsp105/HSP110 with unpurified ab109624 at a dilution of 1/100.

Immunocytochemistry/ Immunofluorescence - Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid gland carcinoma tissue labelling Hsp105/HSP110 with unpurified ab109624 at a dilution of 1/50.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Hsp105/HSP110 antibody [EPR4576] (ab109624)

### 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-Hsp105/HSP110 antibody [EPR4576] (ab109624)

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

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- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
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