

## Product datasheet

# Anti-HMGA2 antibody [EPR18114] ab207301

Recombinant **RabMAb**

★★★★★ 1 Abreviews 7 Images

### Overview

<b>Product name</b>	Anti-HMGA2 antibody [EPR18114]
<b>Description</b>	Rabbit monoclonal [EPR18114] to HMGA2
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein within Human HMGA2 aa 1 to the C-terminus. The exact sequence is proprietary. Database link: <a href="#">P52926</a>
<b>Positive control</b>	IHC-P: Human gastric cancer and colon cancer tissues. ICC/IF: HeLa and HepG2 cells. WB: HEK-293, HepG2 and NCCIT cells lysate

### General notes

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

This product is a [recombinant rabbit monoclonal antibody](#).

### 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 long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR18114
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab207301** 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		1/1000. Predicted molecular weight: 12 kDa.
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★★	1/100.

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## Target

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### Function

Functions as a transcriptional regulator. Functions in cell cycle regulation through CCNA2.

### Involvement in disease

Note=A chromosomal aberration involving HMGA2 is associated with a subclass of benign mesenchymal tumors known as lipomas. Translocation t(3;12)(q27-q28;q13-q15) with LPP is shown in lipomas. HMGA2 is also fused with a number of other genes in lipomas.

Note=A chromosomal aberration involving HMGA2 is associated with pulmonary chondroid hamartomas. Translocation t(3;12)(q27-q28;q14-q15) with LPP is detected in pulmonary chondroid hamartomas.

Note=A chromosomal aberration involving HMGA2 is associated with parosteal lipomas. Translocation t(3;12)(q28;q14) with LPP is also shown in one parosteal lipoma.

Note=A chromosomal aberration involving HMGA2 is found in uterine leiomyoma. Translocation t(12;14)(q15;q23-24) with RAD51L1. Chromosomal rearrangements involving HMGA2 do not seem to be the principle pathobiological mechanism in uterine leiomyoma.

### Sequence similarities

Belongs to the HMGA family.

Contains 3 A.T hook DNA-binding domains.

### Developmental stage

Expressed predominantly during embryogenesis.

### Post-translational modifications

Regulated by cell cycle-dependent phosphorylation which alters its DNA binding affinity.

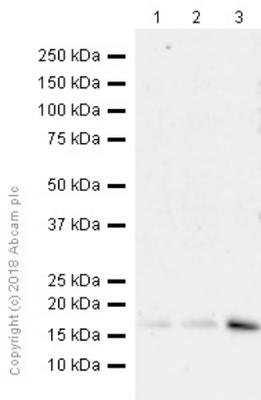
### Cellular localization

Nucleus.

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## Images

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Western blot - Anti-HMGA2 antibody [EPR18114] (ab207301)

**All lanes :** Anti-HMGA2 antibody [EPR18114] (ab207301) at 1/1000 dilution

**Lane 1 :** HEK-293( Human embryonic kidney epithelial cell) 20  $\mu$ g

**Lane 2 :** HepG2 ( Human hepatocellular carcinoma epithelial cell)

**Lane 3 :** NCCIT ( Human pluripotent embryonic carcinoma epithelial cell)

Lysates/proteins at 20  $\mu$ g per lane.

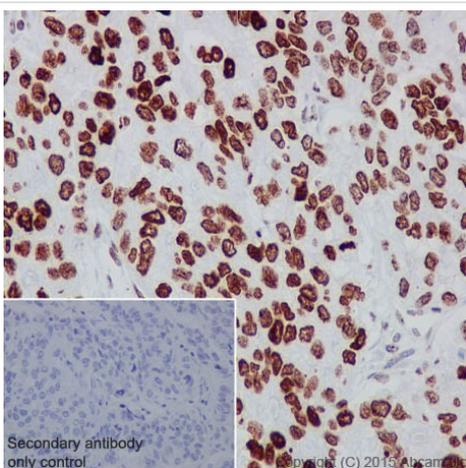
#### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 12 kDa

**Observed band size:** 18 kDa

[why is the actual band size different from the predicted?](#)

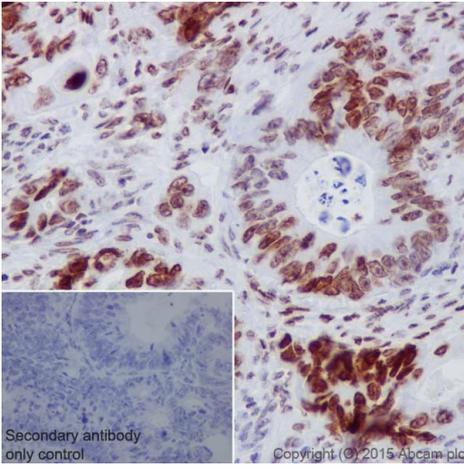


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGA2 antibody [EPR18114] (ab207301)

Immunohistochemical analysis of paraffin-embedded human gastric cancer tissue labeling HMGA2 with ab207301 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nucleus staining on Human gastric cancer is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG 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.

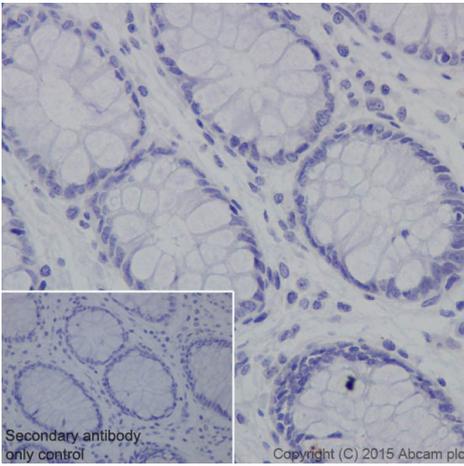


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGA2 antibody [EPR18114] (ab207301)

Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labeling HMGA2 with ab207301 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Nucleus staining on Human colon cancer is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG 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.

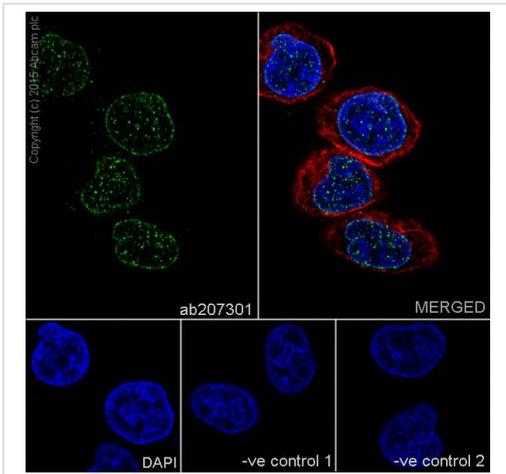


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGA2 antibody [EPR18114] (ab207301)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling HMGA2 with ab207301 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Negative staining on Human colon tissue. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG 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.

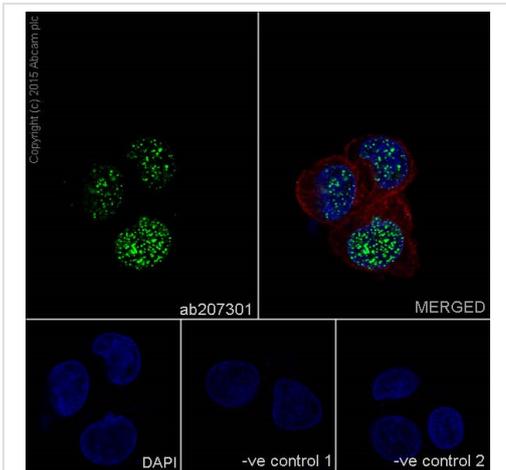


Immunocytochemistry/ Immunofluorescence - Anti-HMGA2 antibody [EPR18114] (ab207301)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling HMGA2 with ab207301 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing 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 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab207301 at 1/100 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.  
 -ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.

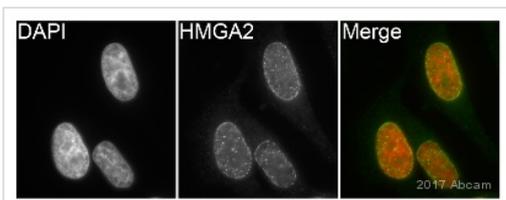


Immunocytochemistry/ Immunofluorescence - Anti-HMGA2 antibody [EPR18114] (ab207301)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling HMGA2 with ab207301 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining on HepG2 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 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab207301 at 1/100 dilution followed by ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.  
 -ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-HMGA2 antibody [EPR18114] (ab207301)

This image is courtesy of an abreview by Kirk Mcmanus

ab207301 staining HMGA2 in the HeLa cell line from Human Cervix by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.5% Triton X-100. Samples were incubated with primary antibody (1/400 in PBS) for 1 hour at 22°C. ab150081 (1/200) was used as the secondary antibody.

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