abcam

Product datasheet

Anti-HMGA2 antibody ab97276

Overview

Product name Anti-HMGA2 antibody

Description Rabbit polyclonal to HMGA2

Host species Rabbit

Tested applications Suitable for: IHC-P, IP, WB, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Recombinant fragment corresponding to Human HMGA2 aa 1-93 (N terminal).

Database link: P52926

Positive control WB: MOLT-4, HepG2, HCT116, HeLa, A431, NIH/3T3, Raw264.7, C2C12, PC-12, Rat2 whole

cell lysate. IP: HepG2 cells. ICC/IF: MCF7, HeLa cells. IHC-P: Rat brain, rat duodenum, human

HuCCT1 xenograft, C2C12 xenograft.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

Storage buffer pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

Clonality Polyclonal

Isotype IgG

1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab97276 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
IHC-P		1/100 - 1/1000.
IP		1/100 - 1/500.
WB	★★★★ <u>(2)</u>	1/500 - 1/50000. Predicted molecular weight: 12 kDa.
ICC/IF		Use a concentration of 1 µg/ml.

Target

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.

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

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.

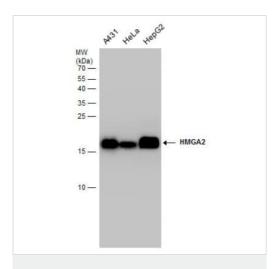
Post-translational

Expressed predominantly during embryogenesis.

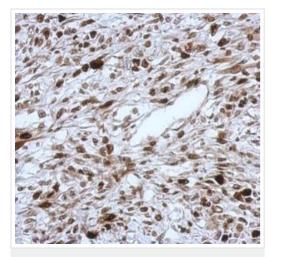
modifications Cellular localization

Nucleus.

Images



Western blot - Anti-HMGA2 antibody (ab97276)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HMGA2 antibody (ab97276)

All lanes: Anti-HMGA2 antibody (ab97276) at 1/10000 dilution

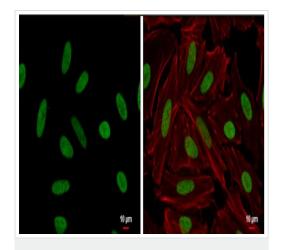
Lane 1 : A431 whole cell extract
Lane 2 : HeLa whole cell extract
Lane 3 : HepG2 whole cell extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 12 kDa

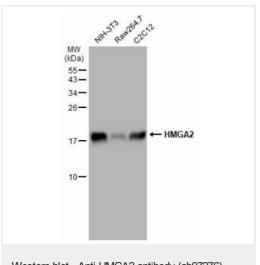
15% SDS-PAGE

Paraffin embedded C2C12 xenograft tissue stained for HMGA2 using ab97276 at 1/500 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-HIMGA2 antibody (ab97276)

HeLa cells stained for HMGA2 (green) using ab97276 at 1/500 dilution in ICC/IF.



Western blot - Anti-HMGA2 antibody (ab97276)

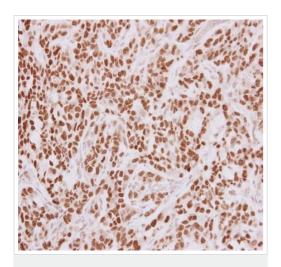
All lanes: Anti-HMGA2 antibody (ab97276) at 1/1000 dilution

Lane 1 : NIH/3T3 whole cell extract
Lane 2 : Raw264.7 whole cell extract
Lane 3 : C2C12 whole cell extract

Lysates/proteins at 30 µg per lane.

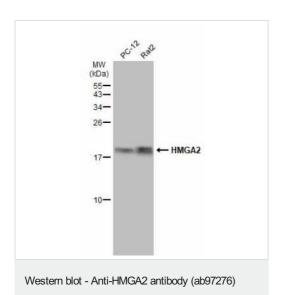
Predicted band size: 12 kDa

15% SDS-PAGE



Paraffin embedded human HuCCT1 xenograft tissue stained for HMGA2 using ab97276 at 1/250 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HMGA2 antibody (ab97276)



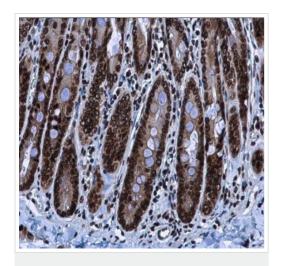
All lanes: Anti-HMGA2 antibody (ab97276) at 1/1000 dilution

Lane 1: PC-12 whole cell extract
Lane 2: Rat2 whole cell extract

Lysates/proteins at 30 µg per lane.

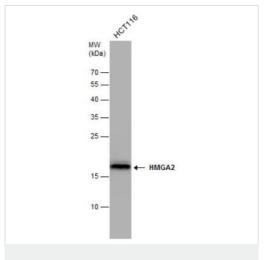
Predicted band size: 12 kDa

15% SDS-PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HMGA2 antibody (ab97276)

Paraffin embedded rat duodenum tissue stained for HMGA2 using ab97276 at 1/500 dilution in immunohistochemical analysis.

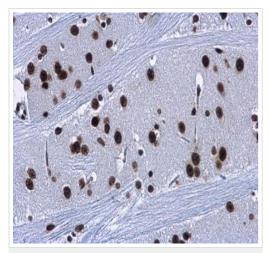


Western blot - Anti-HMGA2 antibody (ab97276)

Anti-HMGA2 antibody (ab97276) at 1/10000 dilution + HCT116 whole cell extract at 30 μg

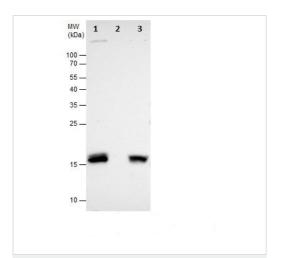
Predicted band size: 12 kDa

15% SDS-PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HMGA2 antibody (ab97276)

Paraffin embedded rat brain tissue stained for HMGA2 using ab97276 at 1/500 dilution in immunohistochemical analysis.



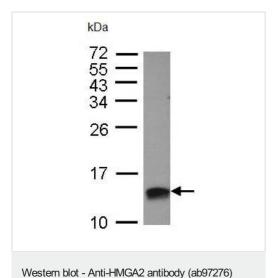
Immunoprecipitation - Anti-HMGA2 antibody (ab97276)

Immunoprecipitation of HMGA2 protein from HepG2 nuclear extracts using 5 μ g of HMGA2 antibody. Western blot analysis was performed using HMGA2 antibody at 1/500 dilution. EasyBlot anti-Rabbit lgG was used as a secondary reagent.

Lane 1: Input

Lane 2: Immunoprecipitation using control IgG

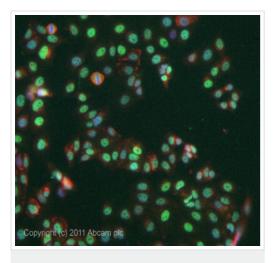
Lane 3: Immunoprecipitation using 5 μ g ab97276



Anti-HMGA2 antibody (ab97276) at 1/1000 dilution + MOLT-4 whole cell lysate at 30 μg

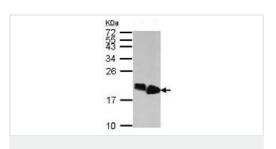
Predicted band size: 12 kDa

15% SDS PAGE



Immunocytochemistry/ Immunofluorescence - Anti-HMGA2 antibody (ab97276)

ICC/IF image of ab97276 stained MCF7 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab97276, 1µg/ml) overnight at +4°C. The secondary antibody (green) was $\underline{ab96899}$, DyLight $^{\tiny @}$ 488 goat anti-rabbit lgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor $^{\tiny @}$ 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



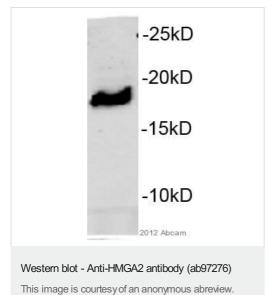
Western blot - Anti-HMGA2 antibody (ab97276)

All lanes: Anti-HMGA2 antibody (ab97276) at 1/10000 dilution

Lane 1: HepG2 **Lane 2**: HCT116

Lysates/proteins at 30 µg per lane.

Predicted band size: 12 kDa



Anti-HMGA2 antibody (ab97276) at 1/1000 dilution + HeLa whole cell lysate at 25 μg

Secondary

Goat anti rabbit secondary IRDye 800CW at 1/1000 dilution

Predicted band size: 12 kDa **Observed band size:** 18 kDa

Exposure time: 10 minutes

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

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