abcam

Product datasheet

Anti-HMGA1 antibody [EPR7839] - BSA and Azide free ab226112

Recombinant RabMAb

1 References 7 Images

Overview

Product name	Anti-HMGA1 antibody [EPR7839] - BSA and Azide free
Description	Rabbit monoclonal [EPR7839] to HMGA1 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, ICC/IF, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: MDA-MB-231 nuclear and membrane fraction lysates, MDA-MB-231 and HCT 116 whole cell lysates prepared in 1% SDS Hot lysis method, MDA-MB-231 and HCT 116 whole cell lysates prepared in RIPA lysis method, SK-OV-3 whole cell lysate. IHC-P: Human transitional cell carcinoma of bladder tissue. ICC/IF: HeLa cells. Flow Cyt (intra): HepG2 cells.
General notes	ab226112 is the carrier-free version of **ab129153**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7839
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab226112 in the following tested applications.

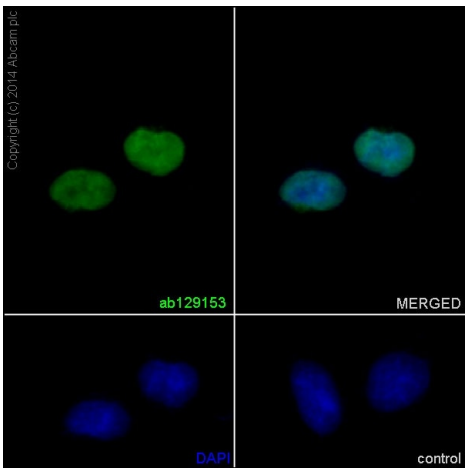
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 17 kDa (predicted molecular weight: 12 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
ICC/IF		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab199376** - Rabbit monoclonal IgG (Low endotoxin, Azide free), is suitable for use as an isotype control with this antibody.

Target

Function	HMG-I/Y bind preferentially to the minor groove of A+T rich regions in double stranded DNA. It is suggested that these proteins could function in nucleosome phasing and in the 3'-end processing of mRNA transcripts. They are also involved in the transcription regulation of genes containing, or in close proximity to A+T-rich regions.
Involvement in disease	Note=A chromosomal aberration involving HMGA1 is found in pulmonary chondroid hamartoma. Translocation t(6;14)(p21;q23-24) with RAD51L1.
Sequence similarities	Belongs to the HMGA family. Contains 3 A.T hook DNA-binding domains.
Post-translational modifications	Constitutively phosphorylated on two or three sites. Phosphorylated upon DNA damage, probably by ATM or ATR. Hyperphosphorylated at early stages of apoptosis, followed by dephosphorylation and methylation, which coincides with chromatin condensation. Isoform HMG-Y can be phosphorylated by HIPK2. HMG-Y is not methylated. Methylation at Arg-58 is mutually exclusive with methylation at Arg-60.
Cellular localization	Nucleus. Chromosome.

Images

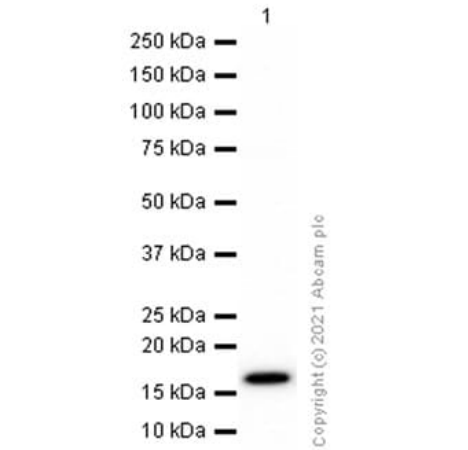


Immunocytochemistry/ Immunofluorescence - Anti-HMGA1 antibody [EPR7839] - BSA and Azide free (ab226112)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling HMGA1 with purified **ab129153** at 1/500. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain.

Control: primary antibody (1/500) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/500).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab129153**).



Western blot - Anti-HMGA1 antibody [EPR7839] - BSA and Azide free (ab226112)

Anti-HMGA1 antibody [EPR7839] (**ab129153**) at 1/10000 dilution + SK-OV-3 (Human ovarian cancer epithelial cell) whole cell lysate at 15 µg

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

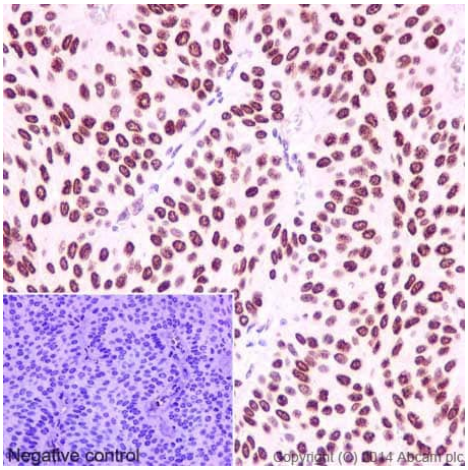
Predicted band size: 12 kDa
Observed band size: 17 kDa

Exposure time: 5 seconds

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM /TBST

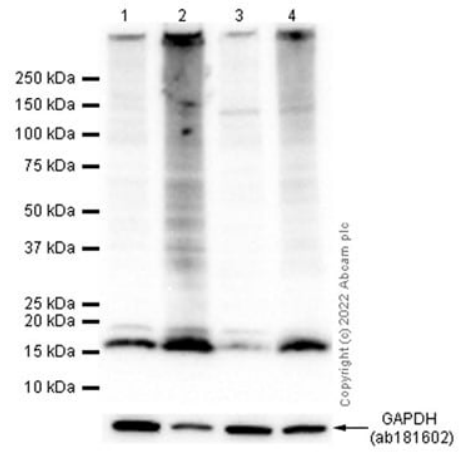
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab129153**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMGA1 antibody [EPR7839] - BSA and Azide free (ab226112)

This IHC data was generated using the same anti-HMGA1 antibody clone, EPR7839, in a different buffer formulation (cat# **ab129153**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human transitional cell carcinoma of bladder tissue labelling HMGA1 with purified **ab129153** at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with Hematoxylin.



Western blot - Anti-HMGA1 antibody [EPR7839] - BSA and Azide free (ab226112)

All lanes : Anti-HMGA1 antibody [EPR7839] (**ab129153**) at 1/1000 dilution

Lane 1 : HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysate prepared in RIPA lysis method
Lane 2 : HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysate prepared in 1% SDS Hot lysis method
Lane 3 : MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysate prepared in RIPA lysis method
Lane 4 : MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysate prepared in 1% SDS Hot lysis method

Lysates/proteins at 20 µg 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: 17 kDa

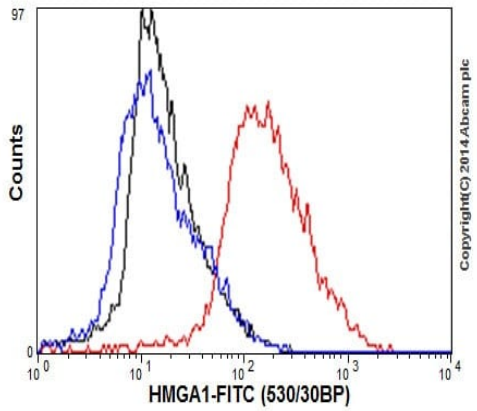
Exposure time: 5 seconds

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM /TBST

We recommend using 1% SDS Hot lysis prepare method to get desired Western Blot results.

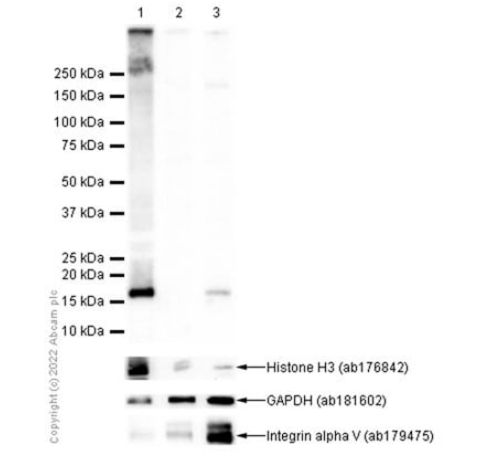
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab129153**).



Flow Cytometry (Intracellular) - Anti-HMGA1 antibody [EPR7839] - BSA and Azide free (ab226112)

Intracellular Flow Cytometry analysis of HepG2 cells labelling HMGA1 with purified **ab129153** at 1/60 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab129153**).



Western blot - Anti-HMGA1 antibody [EPR7839] - BSA and Azide free (ab226112)

All lanes : Anti-HMGA1 antibody [EPR7839] (**ab129153**) at 1/1000 dilution

Lane 1 : MDA-MB-231 (Human breast adenocarcinoma epithelial cell) nuclear fraction lysate
Lane 2 : MDA-MB-231 (Human breast adenocarcinoma epithelial cell) cytoplasm fraction lysate
Lane 3 : MDA-MB-231 (Human breast adenocarcinoma epithelial cell) membrane fraction lysate

Lysates/proteins at 15 µg per lane.

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

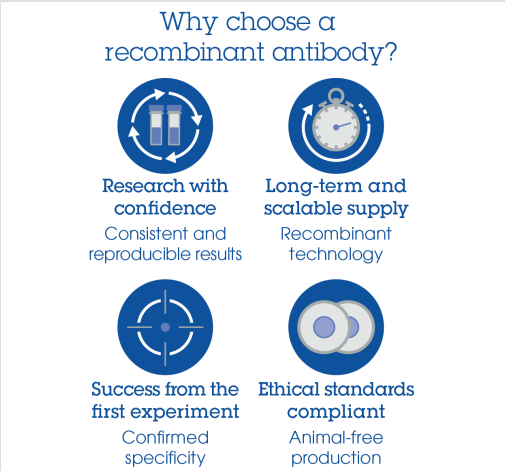
Predicted band size: 12 kDa
Observed band size: 17 kDa

Exposure time: 3 seconds

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM /TBST

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab129153**).



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