

## Product datasheet

### Anti-HMG4 antibody [EP2839Y] ab75782

Recombinant RabMAb

[7 References](#) [8 Images](#)

#### Overview

<b>Product name</b>	Anti-HMG4 antibody [EP2839Y]
<b>Description</b>	Rabbit monoclonal [EP2839Y] to HMG4
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IP, ICC/IF, Flow Cyt (Intra), WB, IHC-P
<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: Human bladder, Human placenta, Mouse brain, Mouse bladder, Rat brain, Rat bladder, Rat placenta and HeLa lysates. IHC-P: Human placenta, Mouse liver, and Rat liver tissues. ICC/IF: 293T cells. Flow Cyt (intra): HeLa cells. IP: HeLa whole 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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP2839Y
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab75782 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
IP		1/20.
ICC/IF		1/250.
Flow Cyt (Intra)		1/20.
WB		1/1000. Detects a band of approximately 25 kDa (predicted molecular weight: 23 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

## Target

### Function

Binds preferentially single-stranded DNA and unwinds double stranded DNA.

### Tissue specificity

Expressed predominantly in placenta.

### Sequence similarities

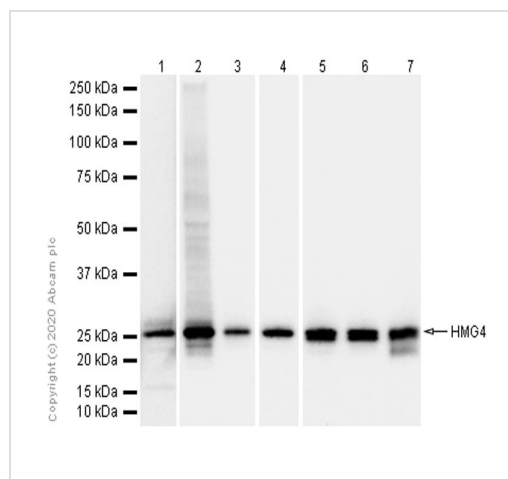
Belongs to the HMGB family.

Contains 2 HMG box DNA-binding domains.

### Cellular localization

Nucleus. Chromosome.

## Images



Western blot - Anti-HMG4 antibody [EP2839Y]  
(ab75782)

**All lanes** : Anti-HMG4 antibody [EP2839Y] (ab75782) at 1/1000 dilution (Purified)

**Lane 1** : Human bladder lysate

**Lane 2** : Human placenta lysate

**Lane 3** : Mouse brain lysate

**Lane 4** : Mouse bladder lysate

**Lane 5** : Rat brain lysate

**Lane 6** : Rat bladder lysate

**Lane 7** : Rat placenta lysate

Lysates/proteins at 20 µg per lane.

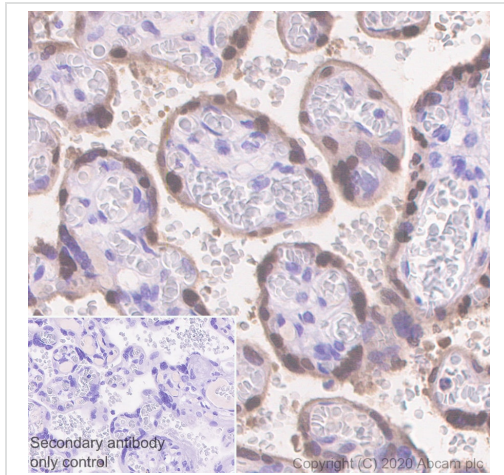
### Secondary

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

**Predicted band size:** 23 kDa

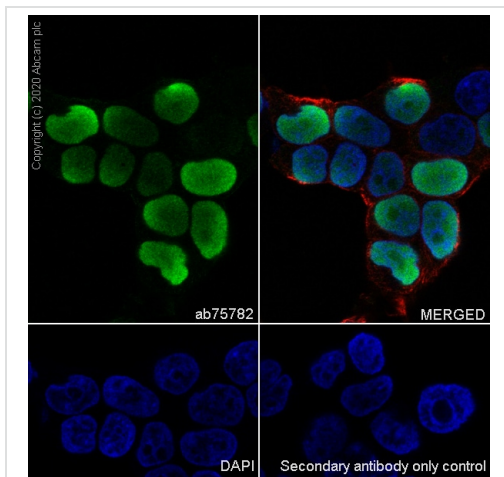
**Observed band size:** 25 kDa

Blocking buffer: 5% NFDm/TBST



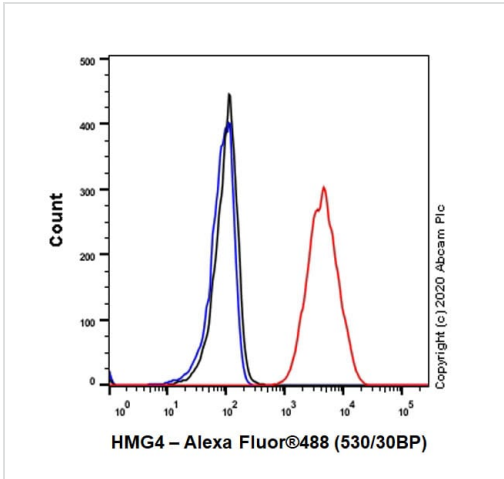
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human placenta tissue sections labeling HMG4 with Purified ab75782 at 1/100 dilution (1.13  $\mu\text{g/ml}$ ). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMG4 antibody [EP2839Y] (ab75782)



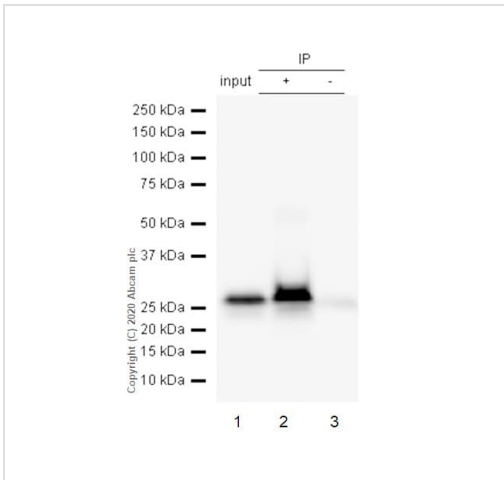
Immunocytochemistry analysis of 293T (Human embryonic kidney epithelial cell) cells labeling HMG4 with Purified ab75782 at 1/250 dilution (0.452  $\mu\text{g/ml}$ ). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5  $\mu\text{g/ml}$ ). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2  $\mu\text{g/ml}$ ) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Immunocytochemistry/ Immunofluorescence - Anti-HMG4 antibody [EP2839Y] (ab75782)



Flow Cytometry (Intracellular) - Anti-HMG4 antibody [EP2839Y] (ab75782)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling HMG4 with Purified ab75782 at 1/20 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunoprecipitation - Anti-HMG4 antibody [EP2839Y] (ab75782)

Purified ab75782 at 1/20 dilution (0.5µg) immunoprecipitating HMG4 in HeLa whole cell lysate.

**Lane 1:** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

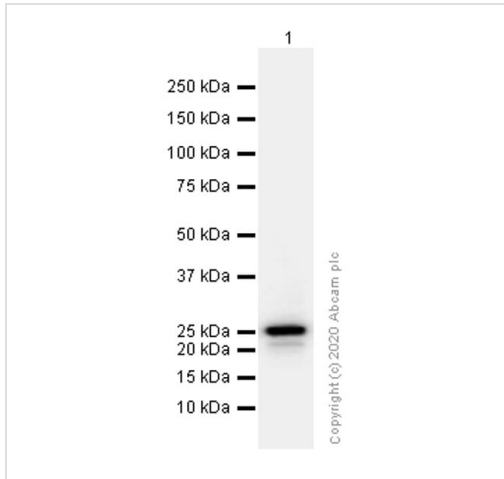
**Lane 2:** ab75782 + HeLa whole cell lysate.

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab75782 in HeLa whole cell lysate.

VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) (1/1000 dilution) was used for Western blotting.

**Blocking Buffer and concentration:** 5% NFD/MTBST.

**Observed band size:** 25 kDa



Western blot - Anti-HMG4 antibody [EP2839Y] (ab75782)

Anti-HMG4 antibody [EP2839Y] (ab75782) at 1/5000 dilution (Purified) + HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 15 µg

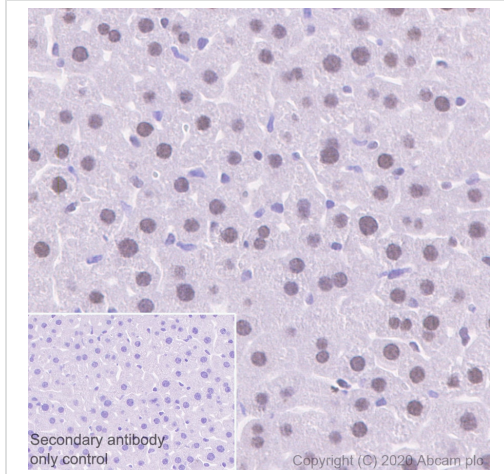
### Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

**Predicted band size:** 23 kDa

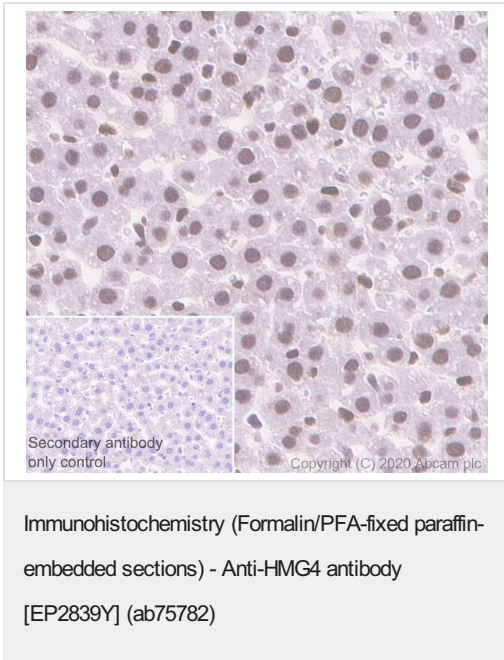
**Observed band size:** 25 kDa

Blocking buffer: 5% NFDM/TBST



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HMG4 antibody [EP2839Y] (ab75782)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue sections labeling HMG4 with Purified ab75782 at 1/100 dilution (1.13 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue sections labeling HMG4 with Purified ab75782 at 1/100 dilution (1.13 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

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

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