

Product datasheet

Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] ab154871

KO VALIDATED Recombinant RabMAB

[1 References](#) [11 Images](#)

Overview

Product name	Anti-HP1 gamma/CBX3 antibody [EPR10465(B)]
Description	Rabbit monoclonal [EPR10465(B)] to HP1 gamma/CBX3
Host species	Rabbit
Specificity	The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human HP1 gamma/CBX3. Database link: Q13185
Positive control	WB: NIH/3T3, HeLa, Molt-4 and HepG2 cell lysates, Mouse and Rat brain lysates; IHC-P: Human breast carcinoma tissue, human gastric cancer, Human normal breast tissue.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production For more information see here . Our RabMAB [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents .

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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR10465(B)
Isotype	IgG

Applications

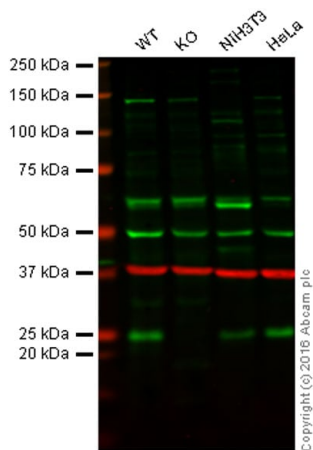
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab154871 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 20 kDa.
IHC-P		1/4000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. For unpurified use at 1/50 - 1/100. See <u>IHC antigen retrieval protocols</u> . The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.

Target

Function	Seems to be involved in transcriptional silencing in heterochromatin-like complexes. Recognizes and binds histone H3 tails methylated at 'Lys-9', leading to epigenetic repression. May contribute to the association of the heterochromatin with the inner nuclear membrane through its interaction with lamin B receptor (LBR). Involved in the formation of functional kinetochore through interaction with MIS12 complex proteins.
Sequence similarities	Contains 2 chromo domains.
Post-translational modifications	Phosphorylated by PIM1. Phosphorylated during interphase and possibly hyper-phosphorylated during mitosis.
Cellular localization	Nucleus. Associates with euchromatin and is largely excluded from constitutive heterochromatin. May be associated with microtubules and mitotic poles during mitosis.

Images



Western blot - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

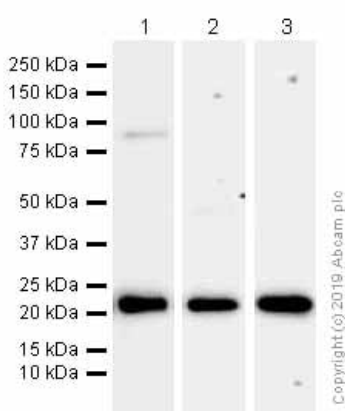
Lane 2: HP1 gamma/CBX3 knockout HAP1 cell lysate (20 µg)

Lane 3: NIH3T3 cell lysate (20 µg)

Lane 4: HeLa cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab154871 observed at 24 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab154871 was shown to recognize HP1 gamma/CBX3 when HP1 gamma/CBX3 knockout samples were used, along with additional cross-reactive bands. Wild-type and HP1 gamma/CBX3 knockout samples were subjected to SDS-PAGE. ab154871 and **ab8245** (loading control to GAPDH) were both diluted to 1/500 and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed **ab216776** secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

All lanes : Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871) at 1/5000 dilution (Purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2 : Mouse brain lysates

Lane 3 : Rat brain lysates

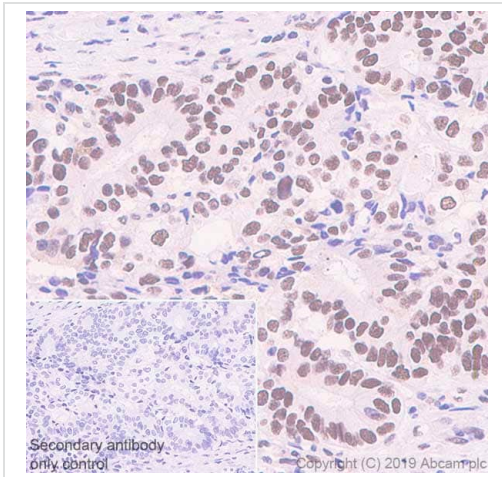
Lysates/proteins at 15 µg per lane.

Secondary

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

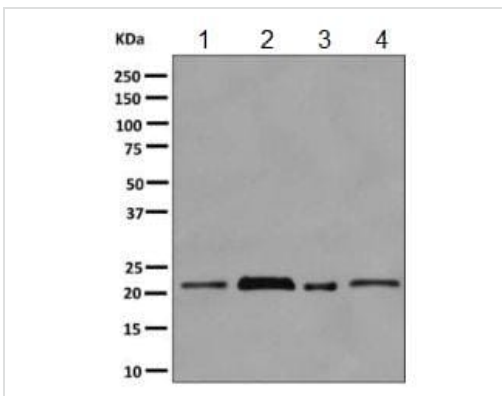
Predicted band size: 20 kDa

Observed band size: 21 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human gastric cancer tissue sections labeling HP1 gamma/CBX3 with purified ab154871 at 1:4000 dilution (0.29 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

All lanes : Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871) at 1/1000 dilution

Lane 1 : NIH/3T3 cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : Molt-4 cell lysate

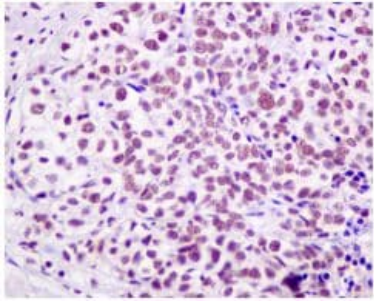
Lane 4 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

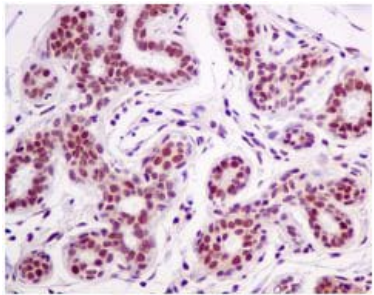
Predicted band size: 20 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling HP1 gamma/CBX3 with ab154871 at 1/50 dilution.

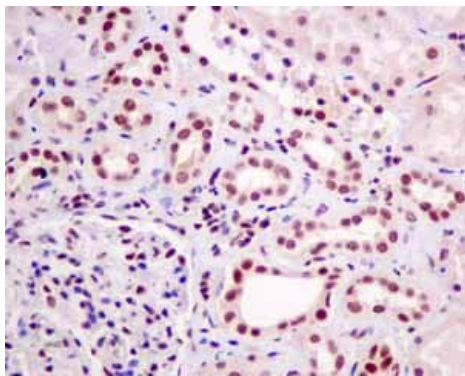
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

Immunohistochemical analysis of paraffin-embedded Human normal breast tissue labeling HP1 gamma/CBX3 with ab154871 at 1/50 dilution.

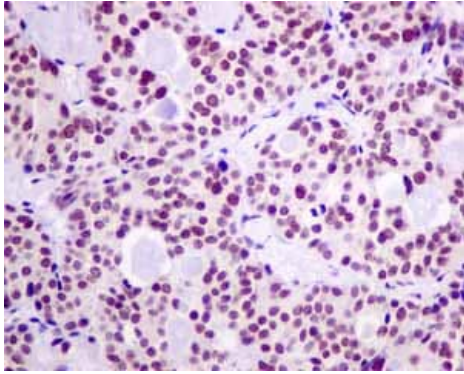
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

Immunohistochemical analysis of paraffin embedded Human normal kidney tissue using ab154871 showing +ve staining.

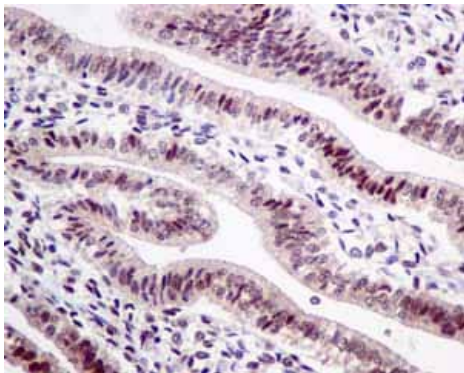
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemical analysis of paraffin embedded Human thyroid gland carcinoma tissue using ab154871 showing +ve staining.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

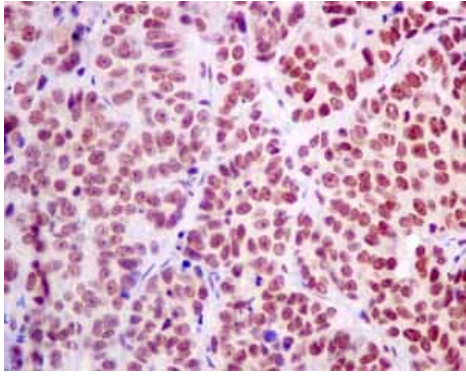
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)



Immunohistochemical analysis of paraffin embedded Human normal uterus tissue using ab154871 showing +ve staining.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)



Immunohistochemical analysis of paraffin embedded Human ovarian carcinoma tissue using ab154871 showing +ve staining.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

Why choose a recombinant antibody?



Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)

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