

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 was previously labelled as HP1 gamma

This product is a recombinant monoclonal antibody, which offers several advantages including:

- 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](#).

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

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

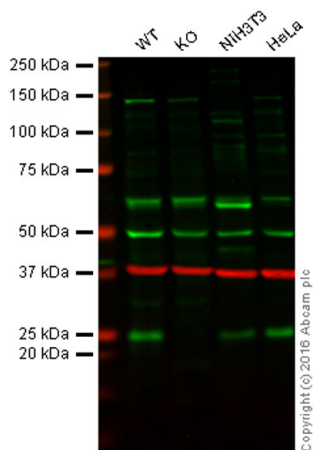
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab154871 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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 IHC antigen retrieval protocols . 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)

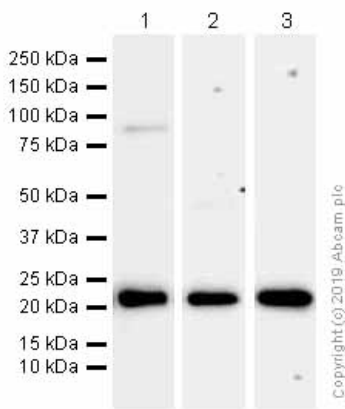
Lane 2: HP1 gamma/CBX3 knockout HAP1 cell lysate (20 µg)

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

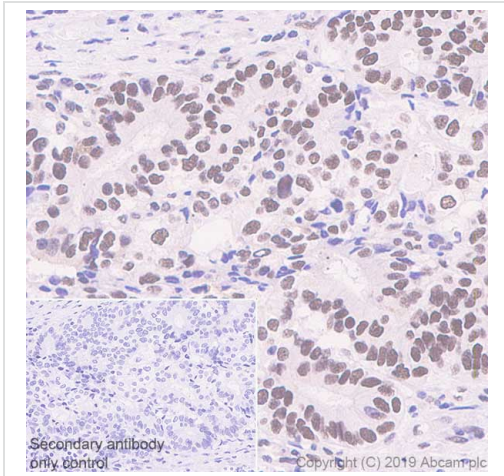
Lysates/proteins at 15 µg per lane.

Secondary

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

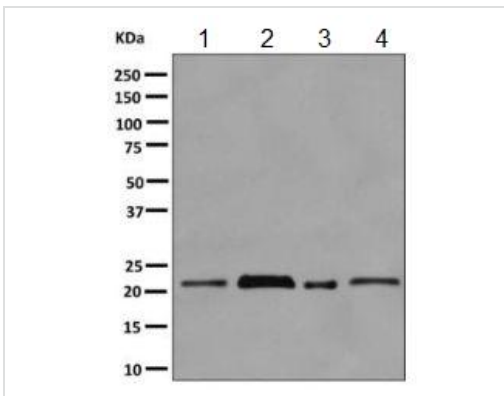
Predicted band size: 20 kDa

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

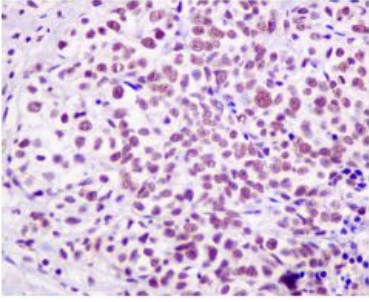
Lane 4 : HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

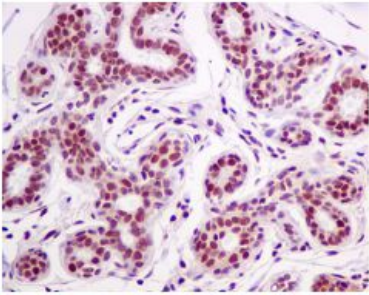
Predicted band size: 20 kDa



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.

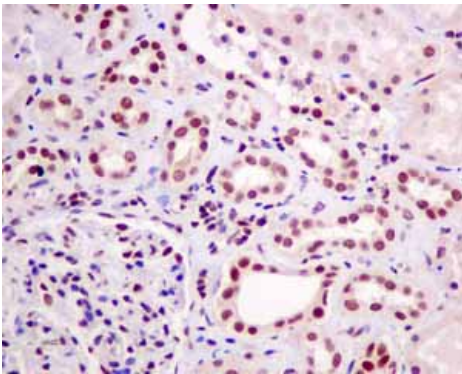
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



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.

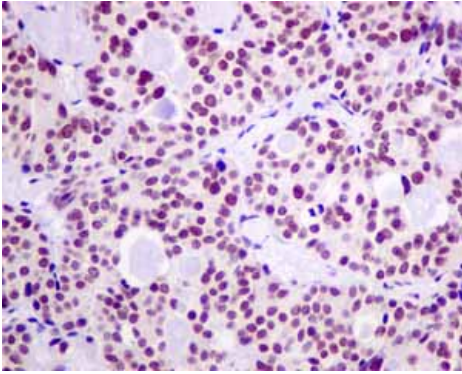
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



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.

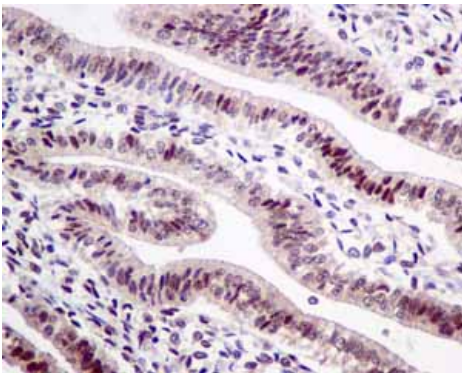
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



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.

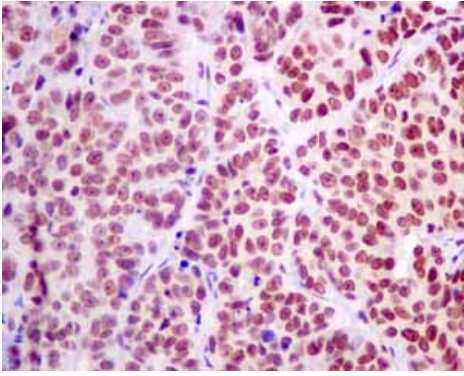
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HP1 gamma/CBX3 antibody [EPR10465(B)] (ab154871)



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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