

Product datasheet

Anti-HP1 gamma/CBX3 antibody ab10480

KO VALIDATED

★★★★★ 9 Abreviews 24 References 3 Images

Overview

Product name	Anti-HP1 gamma/CBX3 antibody
Description	Rabbit polyclonal to HP1 gamma/CBX3
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	This antibody gave a positive signal in the following whole cell lysates: HeLa; MCF7; HEK293.
General notes	<p>The 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.</p> <p>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</p>

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	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype IgG

Applications

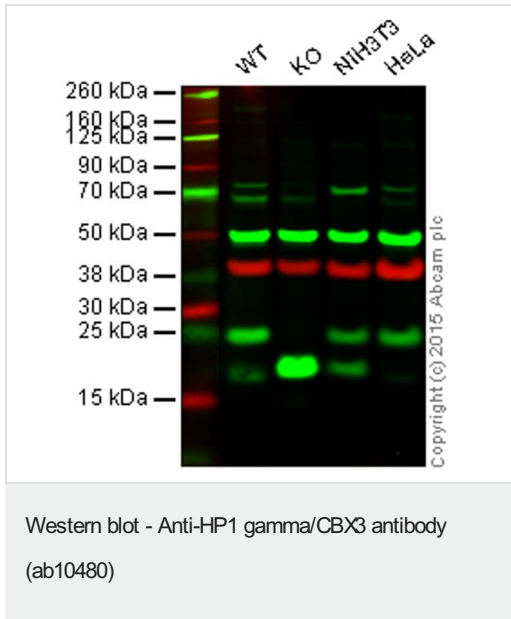
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab10480 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/500 - 1/1000. Detects a band of approximately 24 kDa (predicted molecular weight: 21 kDa).

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.

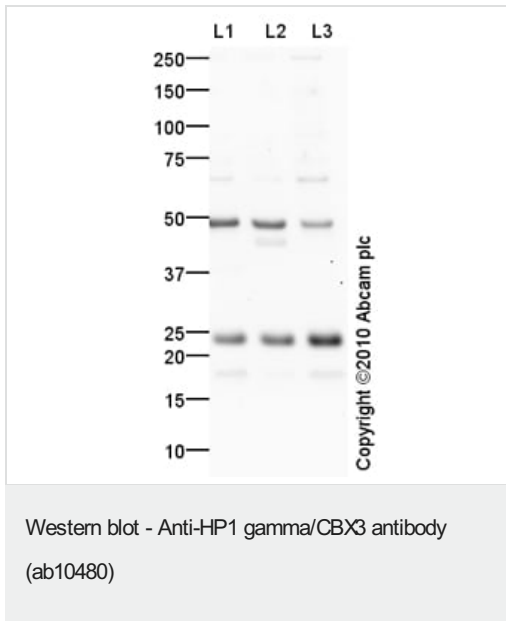
Images



Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: HP1 gamma/CBX3 knockout HAP1 cell lysate (20 µg)
Lane 3: NIH/3T3 cell lysate (20 µg)
Lane 4: HeLa cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab10480 observed at 24 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab10480 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. ab10480 and **ab8245** (loading control to GAPDH) were both diluted 1/1000 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 1/10000 dilution for 1 h at room temperature before imaging.



All lanes : Anti-HP1 gamma/CBX3 antibody (ab10480) at 1 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

Lane 3 : HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 21 kDa

Observed band size: 24 kDa

Additional bands at: 49 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 12 minutes

Anti-HP1 gamma/CBX3 antibody (ab10480) at 1/500 dilution + Recombinant Human HP1 gamma protein ([ab88011](#)) at 0.01 µg

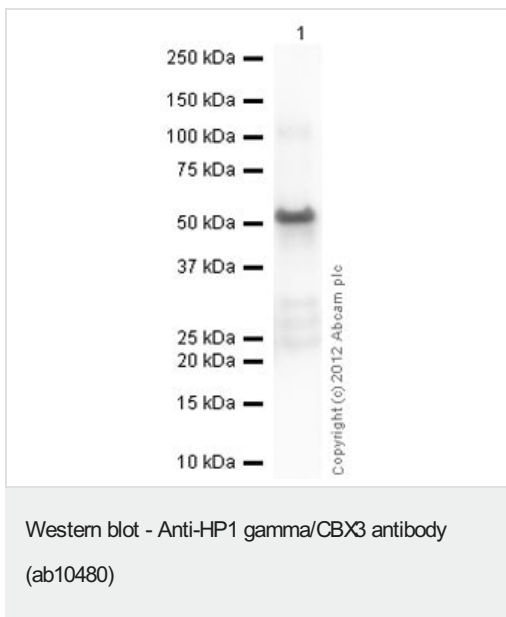
Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 21 kDa



Exposure time: 30 seconds

Ab10480 recognizes the tagged recombinant HP1 gamma/CBX3 protein ([ab88011](#)) which has an expected molecular weight of ~50 kDa.

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

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