

Product datasheet

Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free ab216444

KO VALIDATED Recombinant RabMAB

[5 References](#) [9 Images](#)

Overview

Product name	Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free
Description	Rabbit monoclonal [EPR3745(2)] to Bmi1 - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: IP, IHC-P, WB, ICC/IF
Species reactivity	Reacts with: Rat, Human
Immunogen	A synthetic peptide, corresponding to residues in Human Bmi1 (UniProt P35226).
Positive control	WB: K562, SAOS-2, SW480, MOLT4, PC-12 and HT1080 cell lysates. IHC-P: Human tonsil, colonic adenocarcinoma, lung adenocarcinoma, breast carcinoma and thyroid gland carcinoma tissues. ICC/IF: SW480 and HeLa cells.
General notes	<p>The formulation and the concentration of this product is compatible for metal-conjugation for mass cytometry (CyTOF®).</p> <p>Mouse: Internal data indicated that the antibody is not suitable for WB application in mouse species.</p> <p>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.</p> <p>Our RabMAB® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents.</p> <p>This product is a recombinant rabbit monoclonal antibody.</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. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Constituent: PBS
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR3745(2)
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab216444** 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		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
WB		Use at an assay dependent concentration. Detects a band of approximately 40 kDa (predicted molecular weight: 36 kDa).
ICC/IF		Use at an assay dependent concentration.

Target

Function	Component of the Polycomb group (PcG) multiprotein PRC1 complex, a complex required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. In the PRC1 complex, it is required to stimulate the E3 ubiquitin-protein ligase activity of RNF2/RING2.
Sequence similarities	Contains 1 RING-type zinc finger.
Post-translational modifications	Monoubiquitinated (By similarity). May be polyubiquitinated; which does not lead to proteasomal degradation.
Cellular localization	Nucleus. Cytoplasm.

Images



Western blot - Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free (ab216444)

All lanes : Anti-Bmi1 antibody [EPR3745(2)] (HRP) ([ab197620](#)) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

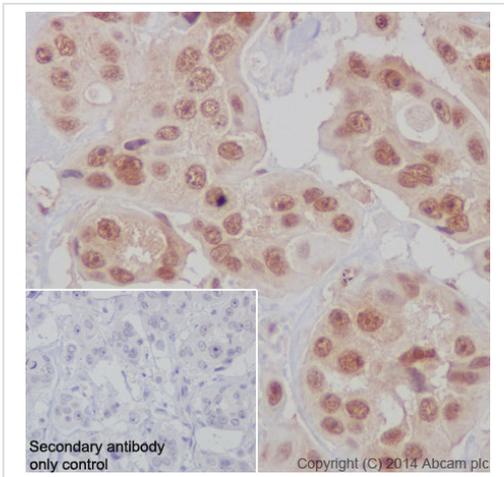
Lane 2 : COMMD3-BMI1 knockout HAP1 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 36 kDa

[ab197620](#) was shown to recognize Bmi1 in wild-type HAP1 cells as signal was lost at the expected MW in COMMD3-BMI1 knockout cells. Additional cross-reactive bands were observed in the wild-type and knockout cells. Wild-type and COMMD3-BMI1 knockout samples were subjected to SDS-PAGE. Ab197620 and [ab130007](#) (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. The loading control was imaged using the Licor Odyssey CLx prior to blots being developed with ECL technique.

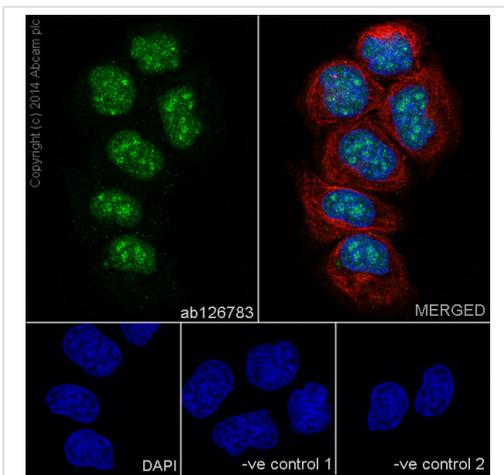
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab197620](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free (ab216444)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling Bmi1 with purified [ab126783](#) at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. [ab97051](#), a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126783](#)).



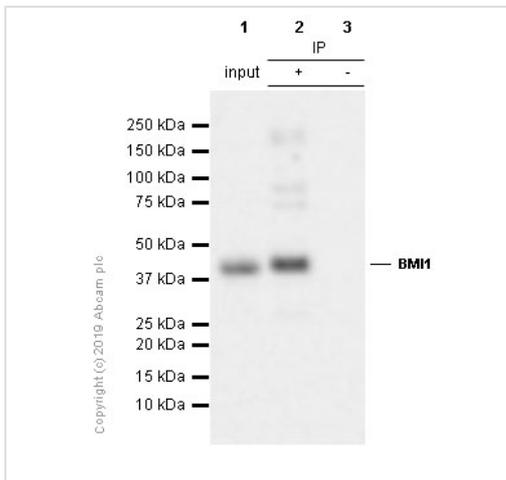
Immunocytochemistry/ Immunofluorescence - Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free (ab216444)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling Bmi1 with purified [ab126783](#) 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. [ab7291](#), a mouse anti-tubulin (1/1000) and [ab150120](#), an Alexa Fluor[®] 594-conjugated goat anti-mouse IgG (1/500) were also used.

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

Control 2: [ab7291](#) (1/1000) and secondary antibody, [ab150077](#), an Alexa Fluor[®] 488-conjugated goat anti-rabbit IgG (1/500).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126783](#)).

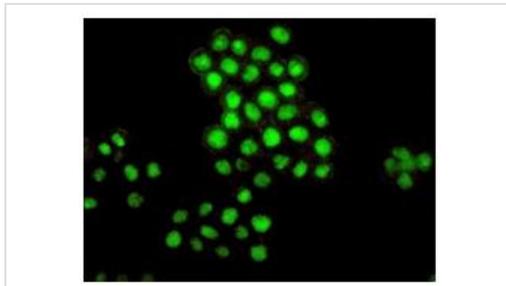


Immunoprecipitation - Anti-Bmi1 antibody
[EPR3745(2)] - BSA and Azide free (ab216444)

[ab126783](#) (purified) at 1/500 immunoprecipitating Bmi1 in 10 µg K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate (**Lanes 1 and 2**, observed at 43 kDa). **Lane 3** - Rabbit monoclonal IgG ([ab172730](#)) instead of [ab126783](#) in K-562 whole cell lysate. For western blotting, VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/1000 dilution.

Blocking/Dilution buffer and concentration: 5% NFDm/TBST.

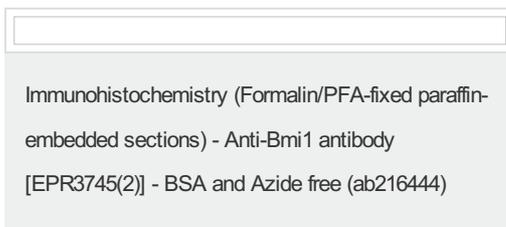
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126783](#)).



Immunocytochemistry/ Immunofluorescence - Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free (ab216444)

Immunocytochemistry/Immunofluorescence analysis of SW480 cells labelling Bmi1 with unpurified [ab126783](#) at a dilution of 1/100.

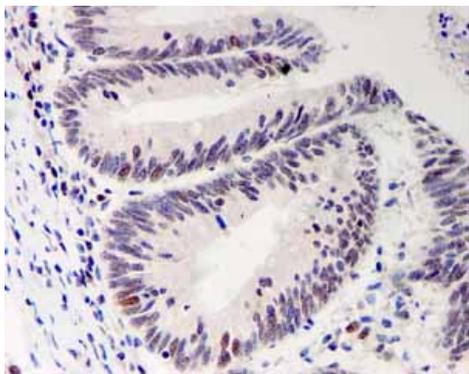
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126783](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free (ab216444)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human normal tonsil tissue labelling Bmi1 with unpurified [ab126783](#).

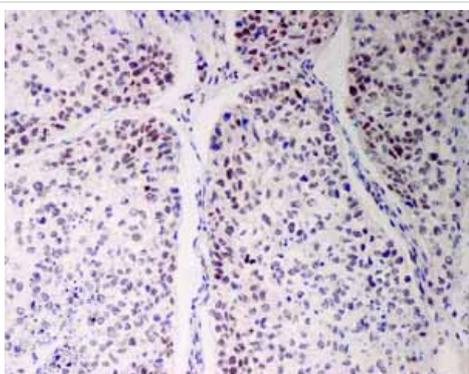
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126783](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free (ab216444)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colonic adenocarcinoma tissue labelling Bmi1 with unpurified [ab126783](#).

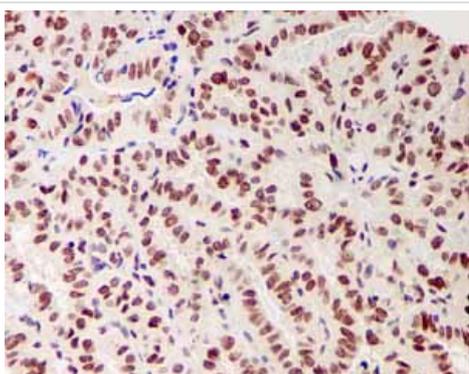
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126783](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free (ab216444)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung adenocarcinoma tissue labelling Bmi1 with unpurified [ab126783](#).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126783](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bmi1 antibody [EPR3745(2)] - BSA and Azide free (ab216444)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid gland carcinoma tissue labelling Bmi1 with unpurified [ab126783](#).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab126783](#)).

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