

BMI 1 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV11143**Specification**

BMI 1 Antibody - Product Information

Application	WB, IHC
Primary Accession	P35226
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	36949

BMI 1 Antibody - Additional Information**Gene ID** 100532731;648Positive Control
Application & Usage**Western Blot: K562 cell lysates**
Western blot: 1:500 - 1:2000, IHC: 1:50 - 1:200.**Other Names**
RNF51, PCGF4**Target/Specificity**
BMI 1**Antibody Form**
Liquid**Appearance**
Colorless liquid**Formulation**
100 µg of antibody in 100 µl PBS containing 0.02% sodium azide, 50% glycerol, pH 7.3**Handling**
The antibody solution should be gently mixed before use.**Reconstitution & Storage**
-20 °C**Background Descriptions****Precautions**
BMI 1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.**BMI 1 Antibody - Protein Information**

Name BMI1**Synonyms** PCGF4, RNF51**Function**

Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class 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 (PubMed: [15386022](http://www.uniprot.org/citations/15386022)), PubMed: [16359901](http://www.uniprot.org/citations/16359901), PubMed: [26151332](http://www.uniprot.org/citations/26151332), PubMed: [16714294](http://www.uniprot.org/citations/16714294), PubMed: [21772249](http://www.uniprot.org/citations/21772249), PubMed: [25355358](http://www.uniprot.org/citations/25355358), PubMed: [27827373](http://www.uniprot.org/citations/27827373)). The complex composed of RNF2, UB2D3 and BMI1 binds nucleosomes, and has activity only with nucleosomal histone H2A (PubMed: [21772249](http://www.uniprot.org/citations/21772249)), PubMed: [25355358](http://www.uniprot.org/citations/25355358)). In the PRC1-like complex, regulates the E3 ubiquitin-protein ligase activity of RNF2/RING2 (PubMed: [15386022](http://www.uniprot.org/citations/15386022), PubMed: [26151332](http://www.uniprot.org/citations/26151332), PubMed: [21772249](http://www.uniprot.org/citations/21772249)).

Cellular Location

Nucleus. Cytoplasm

BMI 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

BMI 1 Antibody - Images**BMI 1 Antibody - Background**

The polycomb group (PcG) of proteins contributes to the maintenance of cell identity, stem cell self-renewal, cell cycle regulation, and oncogenesis by maintaining the silenced state of genes that promote cell lineage specification, cell death, and cell cycle arrest. PcG proteins exist in two complexes that cooperate to maintain long term gene silencing through epigenetic chromatin modifications. The first complex, EED-EZH2, is recruited to genes by DNA-binding transcription factors and methylates histone H3 on Lys27. This histone methyltransferase activity requires the Ezh2, Eed, and Suz12 subunits of the complex. Histone H3 methylation at Lys27 facilitates the recruitment of the second complex, PRC1, which ubiquitinylates histone H2A on Lys119. Bmi1 is a component of the PRC1 complex, which together with Ring1 strongly enhances the E3 ubiquitin ligase activity of the Ring2 catalytic subunit. Bmi1 plays an important role in the

regulation of cell proliferation and senescence through repression of the p16 INK4A and p19 ARF genes and is required for maintenance of adult hematopoietic and neural stem cells.