

**BMI1 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1635a****Specification****BMI1 Antibody - Product Information**

Application	<b>E, WB, IHC, IF, FC</b>
Primary Accession	<a href="#">P35226</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>37kDa KDa</b>

**Description**

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.

**Immunogen**

Purified recombinant fragment of human BMI1 expressed in E. Coli. <br />

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**BMI1 Antibody - Additional Information**

**Gene ID** 100532731;648

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
IHC~~1/200 - 1/1000  
IF~~1/200 - 1/1000  
FC~~1/200 - 1/400

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

BMI1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**BMI1 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:<a href="http://www.uniprot.org/citations/15386022" target="\_blank">15386022</a>, PubMed:<a href="http://www.uniprot.org/citations/16359901" target="\_blank">16359901</a>, PubMed:<a href="http://www.uniprot.org/citations/16714294" target="\_blank">16714294</a>, PubMed:<a href="http://www.uniprot.org/citations/21772249" target="\_blank">21772249</a>, PubMed:<a href="http://www.uniprot.org/citations/25355358" target="\_blank">25355358</a>, PubMed:<a href="http://www.uniprot.org/citations/26151332" target="\_blank">26151332</a>, PubMed:<a href="http://www.uniprot.org/citations/27827373" target="\_blank">27827373</a>). The complex composed of RNF2, UB2D3 and BMI1 binds nucleosomes, and has activity only with nucleosomal histone H2A (PubMed:<a href="http://www.uniprot.org/citations/21772249" target="\_blank">21772249</a>, PubMed:<a href="http://www.uniprot.org/citations/25355358" target="\_blank">25355358</a>). In the PRC1-like complex, regulates the E3 ubiquitin-protein ligase activity of RNF2/RING2 (PubMed:<a href="http://www.uniprot.org/citations/15386022" target="\_blank">15386022</a>, PubMed:<a href="http://www.uniprot.org/citations/21772249" target="\_blank">21772249</a>, PubMed:<a href="http://www.uniprot.org/citations/26151332" target="\_blank">26151332</a>).

**Cellular Location**

Nucleus. Cytoplasm

**BMI1 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](#)

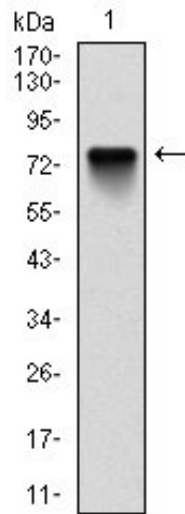
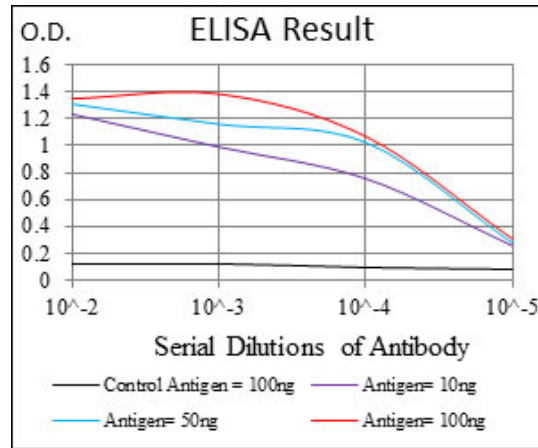


Figure 1: Western blot analysis using BMI1 mAb against human BMI1 (AA: 1-326) recombinant protein. (Expected MW is 74 kDa)

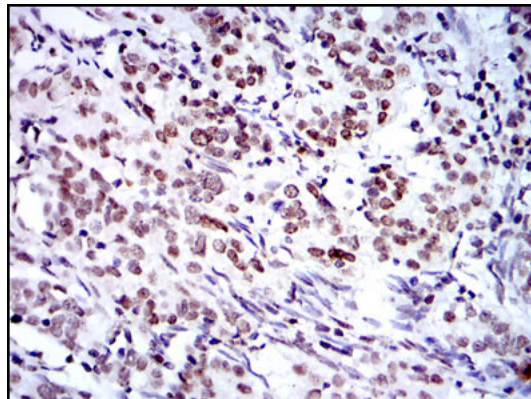


Figure 2: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using BMI1 mouse mAb with DAB staining.

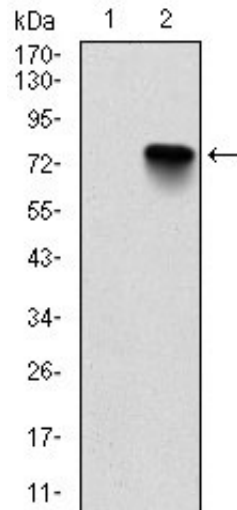


Figure 2: Western blot analysis using BMI1 mAb against HEK293 (1) and BMI1-hlgGfc transfected HEK293 (2) cell lysate.

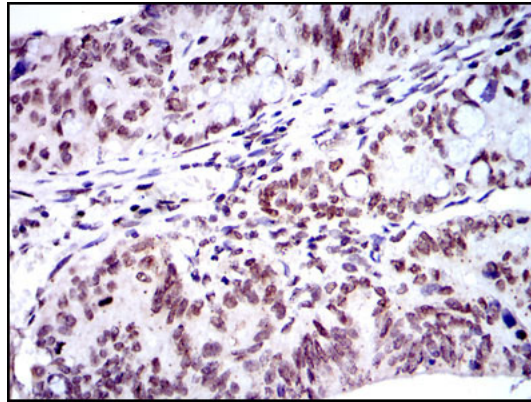


Figure 3: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using BMI1 mouse mAb with DAB staining.

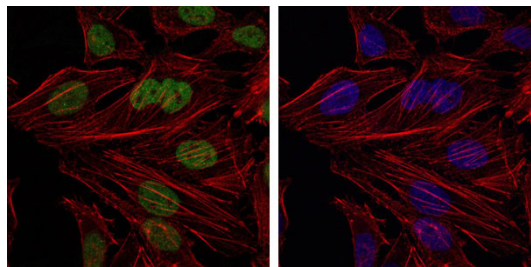


Figure 4: Immunofluorescence analysis of HeLa cells using BMI1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

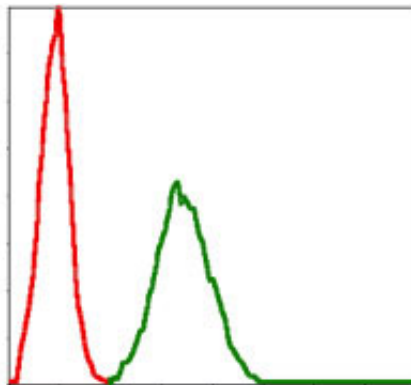


Figure 5: Flow cytometric analysis of NIH/3T3 cells using BMI1 mouse mAb (green) and negative control (red).

### **BMI1 Antibody - References**

1. Mol Cancer. 2009 Nov 10;8:98.
2. Cancer Res. 2009 Dec 1;69(23):9090-5.