

# Bmi1 Antibody

Rabbit mAb Catalog # AP91022

# **Product Information**

| Application<br>Primary Accession<br>Reactivity<br>Clonality<br>Other Names | WB, IHC, IF, ICC, IHF<br><u>P35226</u><br>Rat, Human<br>Monoclonal<br>BMI1 ; Polycomb complex protein BMI 1; RING finger protein 51; RNF51;<br>PCGF4; |
|--|---|
| lsotype  | Rabbit IgG  |
| Host   | Rabbit  |
| Calculated MW  | 36949   |

## **Additional Information**

| Dilution<br>Purification<br>Immunogen<br>Description | WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200<br>Affinity-chromatography<br>A synthesized peptide derived from human Bmi1<br>The polycomb group (PcG) of proteins contributes to the maintenance of cell<br>identity, stem cell self-renewal, cell cycle regulation, and oncogenesis by<br>maintaining the silenced state of genes that promote cell lineage<br>specification, cell death, and cell-cycle arrest. PcG proteins exist in two<br>complexes that cooperate to maintain long-term gene silencing through<br>epigenetic chromatin modifications. The first complex, EED-EZH2, is recruited<br>to genes by DNA-binding transcription factors and methylates histone H3 on<br>Lys27. |
|--|--|
| Storage Condition and Buffer                         | 5  |

### **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: <u>15386022</u> , PubMed: <u>16359901</u> , PubMed: <u>16714294</u> , PubMed: <u>21772249</u> , PubMed: <u>25355358</u> , PubMed: <u>26151332</u> , PubMed: <u>27827373</u> ). The complex composed of RNF2, |

UB2D3 and BMI1 binds nucleosomes, and has activity only with nucleosomal histone H2A (PubMed:<u>21772249</u>, PubMed:<u>25355358</u>). In the PRC1-like complex, regulates the E3 ubiquitin-protein ligase activity of RNF2/RING2 (PubMed:<u>15386022</u>, PubMed:<u>21772249</u>, PubMed:<u>26151332</u>).

#### **Cellular Location**

Nucleus. Cytoplasm

#### Images



Western blot analysis of Bmi1 expression in (1) K562 cell lysate; (2) PC-12 cell lysate.

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