

# **BMI1** monoclonal antibody

Catalog: MB66971

Host: Mouse

Reactivity: Human

# **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 methyl-transferase 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 .

# **Product:**

Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.

# **Molecular Weight:**

# ~ 46 kDa

**Swiss-Prot:** 

# P35226

**Purification&Purity:** 

This antibody is purified through a protein G column.

### **Applications:**

WB (1/500 - 1/1000), IF/ICC (1/10 - 1/50)

### **Storage&Stability:**

Store at  $4 \,^{\circ}{\rm C}$  short term. Aliquot and store at  $-20 \,^{\circ}{\rm C}$  long term. Avoid freeze-thaw cycles.

### **Bioworld Technology, Inc.**

 
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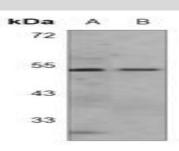
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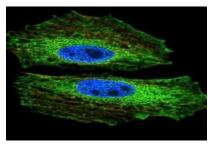
# **Specificity:**

Recognizes endogenous levels of BMI1 protein.

**DATA:** 



Western blot analysis of BMI1 expression in Hela (A), A549 (B) whole cell lysates.



Immunofluorescent analysis of BMI1 staining in NCIH460 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF555 was used to stain the cytoplasm (red). DAPI was used to stain the cell nuclei (blue).

### Note:

For research use only, not for use in diagnostic procedure.

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