



BMI1 Polyclonal Antibody

E90211

Catalog Number: E90211**Amount:** 100ul

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 (1-4). 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 (5). Histone H3 methylation at Lys27 facilitates the recruitment of the second complex, PRC1, which ubiquitinylates histone H2A on Lys119 (6). Bmi1 is a component of the PRC1 complex, which together with Ring1 strongly enhances the E3 ubiquitin ligase activity of the Ring2 catalytic subunit (7). 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 (3,4,8-10).

Species: Rabbit**Isotype:** IgG

Storage/Stability: Store at -20oC or -80oC. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Synonyms: BMI1 ; Polycomb complex protein BMI 1; RING finger protein 51; RNF51; PCGF4

Immunogen: Recombinant protein of human BMI1

Purification: Affinity purification

Reactivity: H M R

Applications: WB IHC

Molecular Weight: 37kDa

Swiss-Prot No. : P35226

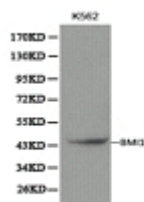
Gene ID: 648

References: 1. Boyer, L.A. et al. (2006) Nature 441, 349-53. 2. Lee, T.I. et al. (2006) Cell 125, 301-13. 3. Park, I.K. et al. (2003) Nature 423, 302-5. 4. Molofsky, A.V. et al. (2003) Nature 425, 962-7. 5. Cao, R. and Zhang, Y. (2004) Mol Cell 15, 57-67. 6. Wang, H. et al. (2004) Nature 431, 873-8. 7. Cao, R. et al. (2005) Mol Cell 20, 845-54. 8. Molofsky, A.V. et al. (2005) Genes Dev 19, 1432-7. 9. Jacobs, J.J. et al. (1999) Nature 397, 164-8. 10. Jacobs, J.J. et al. (1999) Genes Dev 13, 2678-90.

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WB 1:500 - 1:2000

IHC 1:50- 1:200



Western blot analysis of extracts of K562 cells using BMI1 antibody.