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Anti-Bmi1 Antibody

Catalog # ABO11115

Product Information

Application	WB
Primary Accession	P35226
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Polycomb complex protein BMI-1(BMI1) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	100532731;648
Other Names	Polycomb complex protein BMI-1, Polycomb group RING finger protein 4, RING finger protein 51, BMI1, PCGF4, RNF51
Calculated MW	36949
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Nucleus. Cytoplasm.
Source	Eukaryota
Protein Name	Polycomb complex protein BMI-1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human Bmi1(136-152aa EFFDQNRLDRKVNKDKE), different from the related mouse sequence by three amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 1 RING-type zinc finger.

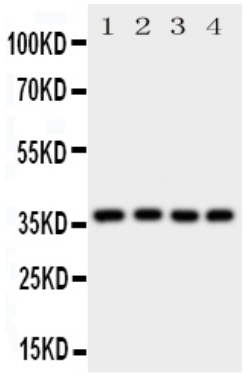
Protein Information

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, PubMed:16359901, PubMed:16714294, PubMed:21772249, PubMed:25355358, PubMed:26151332, PubMed:27827373). The complex composed of RNF2, UB2D3 and BMI1 binds nucleosomes, and has activity only with nucleosomal histone H2A (PubMed:21772249, PubMed:25355358). In the PRC1-like complex, regulates the E3 ubiquitin-protein ligase activity of RNF2/RING2 (PubMed:15386022, PubMed:21772249, PubMed:26151332).
Cellular Location	Nucleus. Cytoplasm

Background

BMI1(BMI1 polycomb ring finger oncogene),also known as RNF51, is a protein which in humans is encoded by the BMI1 gene. The Bmi1 gene is highly conserved in evolution as indicated by zoo blot hybridization with Bmi1 probes corresponding to the protein-encoding domain. By fluorescence in situ hybridization, the human BMI1 gene is assigned to chromosome 10p13. BMI1 has a key role in regulating the proliferative activity of normal stem and progenitor cells. Most importantly, they provided evidence that the proliferative potential of leukemic stem and progenitor cells lacking BMI1 is compromised because they eventually undergo proliferation arrest and show signs of differentiation and apoptosis, leading to transplant failure of the leukemia. Complementation studies showed that BMI1 completely rescues these proliferative defects. Deletion analysis showed that the RING finger and helix-turn-helix domains of BMI1 were required for life span extension and repression of the tumor suppressor p16(INK4). BMI1 selectively extended the life span of these cultures. Confocal microscopy showed that BMI1 transiently colocalized with centromeres during interphase in HeLa cells.

Images



Anti-Bmi1 antibody, ABO11115, Western blottingAll lanes: Anti Bmi1 (ABO11115) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: HT1080 Whole Cell Lysate at 40ugLane 3: COLO320 Whole Cell Lysate at 40ugLane 4: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 37KDObserved bind size: 37KD

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