10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Bmi1 Antibody
Catalog # ABO11115

Specification

Anti-Bmi1 Antibody - 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.

Anti-Bmi1 Antibody - 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 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Nucleus. Cytoplasm.

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.

Anti-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: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

Anti-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 Cytomety
- Cell Culture

Anti-Bmi1 Antibody - Images

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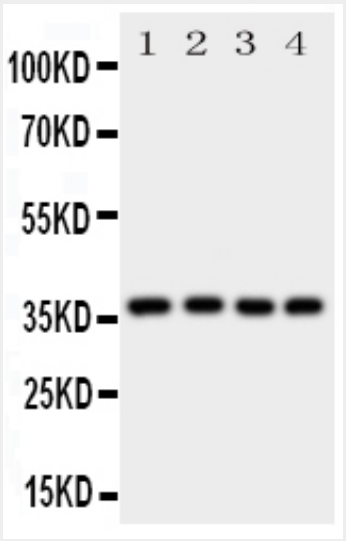

Anti-Bmi1 antibody, ABO11115, Western blottingAll lanes: Anti Bmi1 (ABO11115) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: HT1080 Whole Cell Lysate at 40ugLane 3: COLO320 Whole Cell Lysate at 40ugLane 4: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 37KDObserved bind size: 37KD

Anti-Bmi1 Antibody - Background

BMI1(BMI1 polycomb ring finger oncogene),also known as RNF51,Â is aÂ proteinÂ which in humans is encoded by theÂ BMI1Â gene. TheÂ Bmi1Â gene is highly conserved in evolution as indicated by zoo blot hybridization withÂ Bmi1Â probes corresponding to the protein-encoding domain. By fluorescence in situ hybridization, the humanÂ BMI1Â gene is assigned to chromosome 10p13. BMI1Â 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 lackingÂ BMI1Â 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 thatÂ BMI1Â completely rescues these proliferative defects. Deletion analysis showed that the RING finger and helix-turn-helix domains ofÂ BMI1Â were required for life span extension and repression of the tumor suppressor p16(INK4). BMI1Â selectively extended the life span of these cultures. Confocal microscopy showed thatÂ BMI1Â transiently colocalized with centromeres during interphase in HeLa cells.