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Anti-Bmi1 Picoband Antibody

Catalog # ABO11834

Specification

Anti-Bmi1 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P35226
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Polycomb complex protein BMI-1(BMI1) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Bmi1 Picoband 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, Mouse, Rat

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 NaN3.

Immunogen
A synthetic peptide corresponding to a sequence in the middle region of human Bmi1(135-165aa IEFFDQNRLDRKVNKDKEKSKEEVNDKRYLR), different from the related mouse sequence by four 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 Picoband 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 Picoband 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

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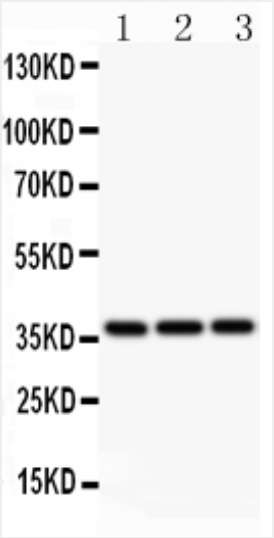
Anti-Bmi1 Picoband Antibody - Images

Anti-Bmi1 Picoband antibody, ABO11834-1.jpgAll lanes: Anti BMI1 (ABO11834) at 0.5ug/mlWB: Recombinant Human BMI1 Protein 0.5ngPredicted bind size: 37KDObserved bind size: 37KD



Anti-Bmi1 Picoband antibody, ABO11834-2.jpgAll lanes: Anti BMI1 (ABO11834) at 0.5ug/mlLane 1: Rat Spleen Tissue Lysate at 50ugLane 2: HT1080 Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugPredicted bind size: 37KD Observed bind size: 37KD

Anti-Bmi1 Picoband Antibody - 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.