

BMI1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21642b

Product Information

Application WB, IF, E **Primary Accession** P35226

Reactivity Human, Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Clone Names RB51571
Calculated MW 36949

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

Target/Specificity This BMI1 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 281-314 amino acids from the

C-terminal region of human BMI1.

Dilution WB~~1:1000-1:2000 IF~~1:25 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

PrecautionsBMI1 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

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

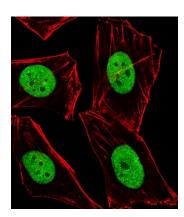
Background

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. In the PRC1 complex, it is required to stimulate the E3 ubiquitin-protein ligase activity of RNF2/RING2.

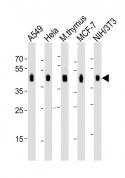
References

Alkema M.J., et al. Hum. Mol. Genet. 2:1597-1603(1993). Ota T., et al. Nat. Genet. 36:40-45(2004). Deloukas P., et al. Nature 429:375-381(2004). Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Levy L.S., et al. Oncogene 8:1833-1838(1993).

Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Hela (Human cervical epithelial adenocarcinoma cell line) cells labeling BMI1 with AP21642b at 1/25 dilution, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/400 dilution (green). Confocal image showing nuclear staining on Hela cell line. Cytoplasmic actin is detected with Alexa Fluor® 555 conjugated with Phalloidin (OB16636430) at 1/100 dilution (red).



All lanes: Anti-BMI1 Antibody (C-term) at 1:1000-1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: mouse thymus lysate Lane 4: MCF-7 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 37 kDa. Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.