

### BMI1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21642b

### Specification

# **BMI1 Antibody (C-term) - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IF,E <u>P35226</u> Human, Mouse Rabbit polyclonal Rabbit IgG 36949

### **BMI1** Antibody (C-term) - 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.

Precautions

BMI1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **BMI1 Antibody (C-term) - 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:21772249, PubMed:25355358).

Cellular Location Nucleus. Cytoplasm

# **BMI1 Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

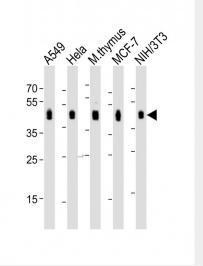
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

BMI1 Antibody (C-term) - 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.

# BMI1 Antibody (C-term) - 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.

# BMI1 Antibody (C-term) - 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).