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BMI1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1635a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	P35226
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	3E3
Isotype	IgG1
Calculated MW	36949
Description	Component of the Polycomb group (PcG) multiprotein PRC1 complex, a complex 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.
Immunogen	Purified recombinant fragment of human BMI1 expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

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
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BMI1 Antibody 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

References

1. Mol Cancer. 2009 Nov 10;8:98. 2. Cancer Res. 2009 Dec 1;69(23):9090-5.

Images

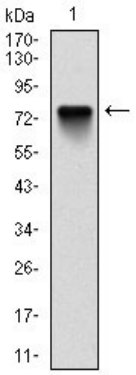


Figure 1: Western blot analysis using BMI1 mAb against human BMI1 (AA: 1-326) recombinant protein. (Expected MW is 74 kDa)

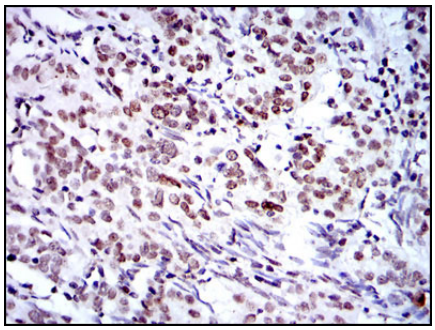


Figure 2: Immunohistochemical analysis of paraffin-embedded cervical cancer tissues using BMI1 mouse mAb with DAB staining.

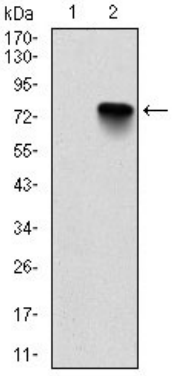


Figure 2: Western blot analysis using BMI1 mAb against HEK293 (1) and BMI1-hIgGFc transfected HEK293 (2) cell lysate.

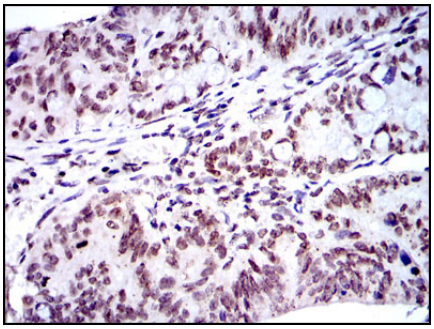


Figure 3: Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using BMI1 mouse mAb with DAB staining.

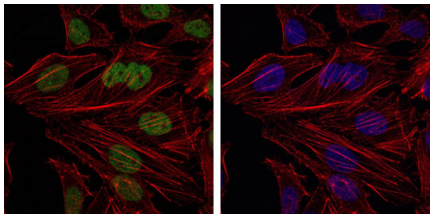


Figure 4: Immunofluorescence analysis of Hela cells using BMI1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

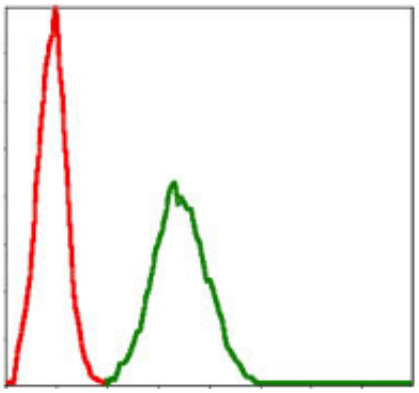


Figure 5: Flow cytometric analysis of NIH/3T3 cells using BMI1 mouse mAb (green) and negative control (red).

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