

Rabbit Anti-PCGF4/BMI1 antibody

SL2999R

Product Name:	PCGF4/BMI1
Chinese Name:	组蛋白相关Bmi1抗体
Alias:	B lymphoma Mo MLV insertion region; Bmi 1; BMI-1; MGC12685; Murine leukemia viral (bmi 1) oncogene homolog; Oncogene BMI 1; PCGF 4; PCGF4; Polycomb complex protein BMI 1; Polycomb complex protein BMI-1; Polycomb group ring finger 4; Polycomb group RING finger protein 4; RING finger protein 51; BMI1; RNF51; RAD18; BMI1_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/TestIF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	37kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Bmi1/PCGF4:61-160/326
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The Bmi1 oncogene induces telomerase activity and immortalizes human mammary epithelial cells. Bmi1 extends the replicative life span of human fibroblasts by suppressing the p16-dependent senescence pathway.

Polycomb group (PcG) genes are involved in the maintenance of cellular memory through epigenetic chromatin modifications. Recent studies have implicated a role for PcG genes in the self-renewal of hematopoietic stem cells (HSCs), a process in which cellular memory is maintained through cell division. Among the PcG genes, Bmi1 plays a central role in the inheritance of stemness, and its forced expression promotes HSC self-renewal. These findings highlight the importance of epigenetic regulation in HSC self-renewal and identify PcG genes as potential targets for therapeutic HSC manipulation. Involved in maintaining the transcriptionally repressive state of genes. Modifies chromatin, rendering it heritably changed in its expressibility.

Function:

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.

Subcellular Location:

Nucleus. Cytoplasm.

Post-translational modifications:

Monoubiquitinated. May be polyubiquitinated; which does not lead to proteasomal degradation.

Similarity:

Contains 1 RING-type zinc finger.

SWISS:

P35226

Gene ID:

648

Database links:

Entrez Gene: 100532731Human

Entrez Gene: 648 Human

Entrez Gene: 12151 Mouse

Entrez Gene: 307151Rat

Omim: 164831Human

SwissProt: P35226Human

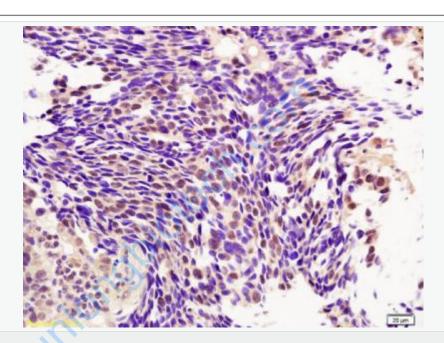
SwissProt: P25916Mouse

Unigene: 380403Human

Unigene: 289584 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Human lung cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (BMI1) Polyclonal Antibody, Unconjugated (SL2999R) at 1:400 overnight at 4°C, followed by a conjugated secondary antibody (sp-0023) for 20 minutes and DAB staining.