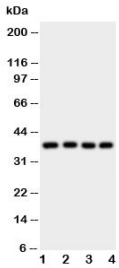
Bmi1 Antibody (R30905)

Catalog No.	Formulation	Size
R30905	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P35226
Applications	Western Blot : 0.5-1ug/ml
Limitations	This Bmi1 antibody is available for research use only.



Western blot testing of Bmi1 antibody and Lane 1: HeLa; 2: HT1080; 3: COLO320; 4: MCF-7 cell lysate. Predicted molecular weight: 37-43 kDa.

Description

Bmi1 Antibody detects B lymphoma Mo MLV insertion region 1, also known as RNF51, a protein which in humans is encoded by the BMI1 gene. The 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 gene is assigned to chromosome 10p13. It 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 the protein 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 the protein transiently colocalized with centromeres during interphase in HeLa cells.

Additional studies involving polycomb-mediated transcriptional repression, stem cell renewal, and epigenetic regulation pathways may benefit from our BMI1 antibody page featuring clone BMI1/2823 with HuProt protein microarray specificity validation.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Bmi1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the middle region of human Bmi1 (EFFDQNRLDRKVNKDKE) was used as the immunogen for this Bmi1 antibody.

Storage

After reconstitution, the Bmi1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.