CELL APPLICATIONS, INC.

Bmi1 Antibody

Cat. No. CB16351

Applications:	**WB,**
Detected MW:	**43 kDa**
Species & Reactivity:	**Human,**
Isotype:	**Mouse Monoclonal IgG1**

BACKGROUND

Bmi1 is a member of the Polycomb group of transcription repressors that was initially identified as an oncogene cooperating with c-myc in a murine model of lymphoma.[1] Bmi1 has a RING finger at the amino-terminus and a central helix-turn-helix domain. The RING finger domain is required for the generation of lymphoma in Eμ-Bmi1 transgenic mice. Postnatal mice lacking Bmi1 exhibit defects in hematopoiesis, skeletal patterning, neurological functions, and development of the cerebellum.[2] It has recently been shown that Bmi1 is necessary for efficient self-renewing cell divisions of adult HSCs as well as adult peripheral and central nervous system neural stem cells, but that it is less critical for the generation of differentiated progeny.[3] BMI1 may also play a key role in some types of cancer. Gene-profiling studies suggest that Bmi1 modulates HSC self-renewal through the regulation of genes important for stem cell fate decisions, as well as survival genes, antiproliferative genes, and stem cell–associated genes including p16Ink4a and p19Arf.[4] Bmi1 could be used as a molecular target to induce senescence in cancer stem cells.

References:
1. Park, I. K. et al: Nature 423:302, 2003.
2. Alkema, M. et al: Oncogene 15:899, 1997.
3. van der Lugt, N. M. et al: Genes Dev. 8:757, 1994.
4. Jacob, J. et al: Nature 397:164, 1999.

TECHNICAL INFORMATION

Source:
E. coli-expressed recombinant human Bmi1 protein fragments.

Specificity and Sensitivity:
This antibody detects endogenous levels of human Bmi1 proteins.

Storage Buffer: PBS and 30% glycerol

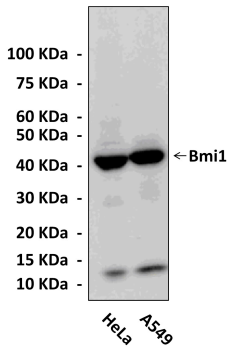
Storage:
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC	n/d
ICC	n/d
FACS	n/d

*****Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Specific detection of Bmi11 proteins by anti-Bmi1 (10H8) Western Blot analysis in various cell lysates: HeLa, and A549.