

Product Name: KD-Validated Bmi1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00197**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 36.9kDa

Antigen Information

Gene Name	BMI1
Alternative Names	BMI1 Proto-Oncogene, Polycomb Ring Finger; RNF51; PCGF4; Polycomb Group RING Finger Protein 4; Polycomb Complex Protein BMI-1; B Lymphoma Mo-MLV Insertion Region 1 Homolog (Mouse); Murine Leukemia Viral (Bmi-1) Oncogene Homolog; B Lymphoma Mo-MLV Insertion Region 1 Homolog; BMI1 Polycomb Ring Finger Proto-Oncogene; BMI1 Polycomb Ring Finger Oncogene; Polycomb Group Ring Finger 4; Polycomb Group Protein Bmi1; Ring Finger Protein 51; RING Finger Protein 51; Flvi-2/Bmi-1; FLVI2/BMI1
Gene ID	648.0
SwissProt ID	P35226
Immunogen	A synthesized peptide derived from human BMI1

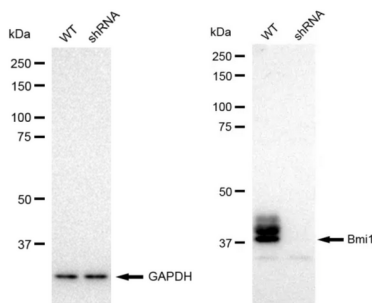
Background

This gene encodes a ring finger protein that is major component of the polycomb group complex 1 (PRC1). This complex functions through chromatin remodeling as an essential epigenetic repressor of multiple regulatory genes involved in embryonic development and self-renewal in somatic stem cells. This protein also plays a central role in DNA damage repair. This gene is an oncogene and aberrant expression is associated with numerous cancers and is associated with resistance to certain chemotherapies. A pseudogene of this gene is found on chromosome X. Read-through transcription also exists between this gene and the upstream COMM domain containing 3 (COMMD3) gene. [provided by RefSeq, Sep 2015]

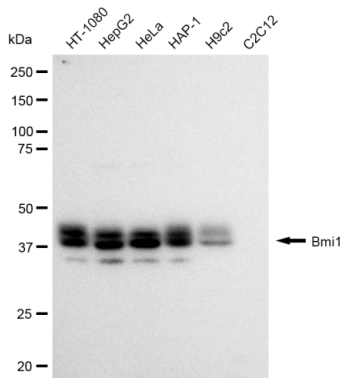
Research Area

Cell Biology, Epigenetics and Nuclear Signaling, Stem Cells, Cancer

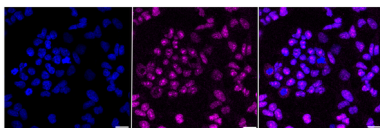
Image Data



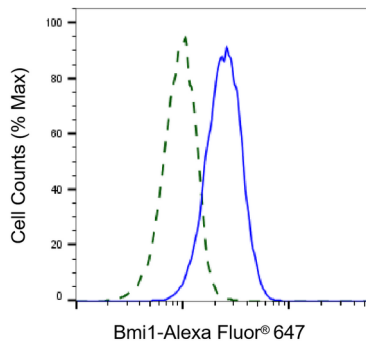
Western blotting analysis using Bmi1 antibody (KVA00197). Bmi1 expression in wild type (WT) and Bmi1 shRNA knockdown (KD) 293T cells with 30 µg of total cell lysates. GAPDH serves as a loading control. The blot was incubated with Bmi1 antibody (KVA00197, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (APS0635, 1:10,000) respectively.



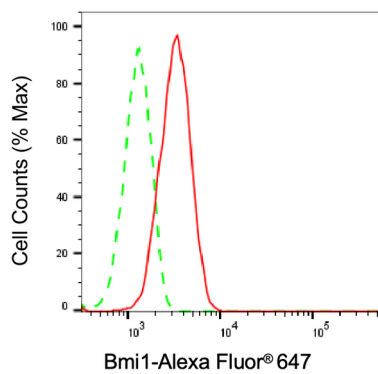
Western blotting analysis using Bmi1 antibody (KVA00197). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Bmi1 antibody (KVA00197, 1:5,000) and HRP-conjugated goat anti rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells with Bmi1 antibody (KVA00197, 1:1,000). Nuclei were stained blue with DAPI; Bmi1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of Bmi1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Bmi1 antibody (KVA00197, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Bmi1 expression in HepG2 cells using Bmi1 antibody (KVA00197, 1:2,000). Green, isotype control; red, Bmi1.