OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA319184

BMI1 Goat Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, WB
Recommended Dilution:	ELISA: 1:5,000 - 1:30,000, WB: 1:500 - 1:3,000, IF: 1:200
Reactivity:	Human
Host:	Goat
Clonality:	Polyclonal
Immunogen:	This affinity purified antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 252-264 of human Bmi1 protein.
Formulation:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	BMI1 proto-oncogene, polycomb ring finger
Database Link:	NP_005171 Entrez Gene 648 Human P35226
Synonyms:	BMI1; FLVI2; PCGF4; RNF51

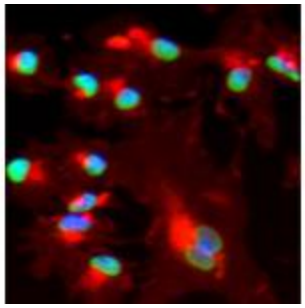
View online »

Note: The Bmi-1 oncogene (also known as polycomb group ring finger 4, MGC12685, murine leukemia viral (bmi 1) oncogene homolog, oncogene BMI 1, polycomb complex protein BMI 1 and RNF51) induces telomerase activity and immortalizes human mammary epithelial cells. Bmi-1 extends the replicative life span of human fibroblasts by suppressing the p16-dependent senescence pathway. The 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, Bmi-1 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.

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

Product images:

WB using Anti-Bmi1 antibody shows detection of a band ~37 kDa corresponding to human Bmi1 (arrowhead).Approximately 20 ug of a U2OS whole cell lysate (bone osteosarcoma) was separated by 4-20% SDS-PAGE and transferred onto nitrocellulose. The primary antibody diluted to 1:1,000 in PBS containing 1% nonfat dry milk. The membrane was washed and reacted with a 1:20,000 dilution of IRDye™800 conjugated Rb-a-Goat IgG [H&L] MX for 45 min at room temperature.



Immunofluorescence using affinity purified goat anti Bmi1 shows nuclear staining (green) of methanol fixed (100%, 5 min) HepG2 cells. The cells were blocked and permeabilized in 1%BSA / 10% normal donkey serum / 0.3M glycine in 0.1% PBS-Tween for 1h prior to incubation with the primary antibody (1:200 dilution) overnight at +4°C and detected with a 488nm fluorescent dye conjugated secondary Ab. Cell nuclei are stained with DAPI (blue) and plasma membranes are stained with WGA (red).