

Qty: 100 μg/200 μL Mouse anti-Bmi-1 **Catalog No.** 37-5400

Lot No.

Mouse anti-Bmi-1

FORM

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

CLONE: 1H6B10G7 ISOTYPE: Mouse IgG₁-kappa

IMMUNOGEN

Synthetic peptide derived from the mid region of the human Bim-1 protein.

SPECIFICITY

This antibody is specific for the ~45 kDa Bim-1 protein.

REACTIVITY

Reactivity has been confirmed with human K562 cells.

Sample	Immuno- precipitation (native)	Western Blotting	ELISA
Human	0*	+++	ND
Immunogen	ND	ND	++

⁽Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.1-0.5 μg/mL Western Blotting: 1-3 μg/mL Immunoprecipitation: N/A

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

^{*} No reactivity observed under condition tested.

BACKGROUND

Bmi1, a transcriptional repressor, also known as RNF51, MGC12685, or BUP, is a transcriptional repressor that encodes a set of polycomb complex protein bmi-1 family members ¹. The molecule is involved in segment specification, cell growth and/or maintenance, transcription regulation, and chromatin modification. A critical target of Bmi-1 is the *INK4a* locus, which encodes the p16 and p19^{ARF} (p14^{ARF} in humans) tumor suppressor proteins ². Overexpression of Bmi-1 extends the replicative life spans of mouse and human fibroblasts, possibly by repressing p16 and p19/p14^{ARF}. A study using mouse embryo fibroblasts (MEFs) harboring specific deletions in the *INK4a* locus indicates that p19^{ARF}, but not p16, is required for replicative senescence of mouse cells ³.

Bmi 1 is located in nuclear and expressed on brain (cerebellar cortex) and unregulated in many malignant diseases like ovary cancer, and lymphoma.

REFERENCES

- 1. Alkema MJ, et al. *Hum. Mol. Genet.* 2:1597-1603, 1993.
- 2. Jacobs JJ, et al. Nature 397:164-168, 1999.
- 3. Krimpenfort P, et al. Nature 413:83-86, 2001.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose [®] 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

Conjugato	ZyMAX™ Goat x Rabbit IgG	ZyMAX™ Goat x Mouse IgG
Conjugate	(H+L)	(H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Су™3	81-6115	81-6515
Су™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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