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Product Information

Anti-BMI1 (C-terminal)
produced in rabbit, affinity isolated antibody

Product Number **SAB4200034**

Product Description

Anti-BMI1 (C-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human BMI1 (Gene ID: 648) conjugated to KLH. The corresponding sequence differs by one and two amino acids in rat and mouse, respectively. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-BMI1 (C-terminal) recognizes human BMI1. The antibody may be used in several immunochemical techniques including immunoblotting (~37 kDa), immunoprecipitation, and immunofluorescence. Detection of the BMI1 band by immunoblotting is specifically inhibited with the immunizing peptide.

The human proto-oncogene BMI1 (also known as Polycomb complex protein BMI-1**,** Polycomb group RING finger protein 4, and RING finger protein 51) is a member of the mammalian Polycomb Group (Pc-G) genes, which are known to play an important role as epigenetic gene silencers during development.

Elevated expression of BMI1 is associated with many cancers such as mantle cell lymphoma, B-cell non-Hodgkin's lymphoma, myeloid leukemia, non–small cell lung cancer, colorectal cancer, breast cancer, and prostate cancer.[1] BMI1has been shown to be also required for self-renewal of hematopoietic stem cells[2] and neuronal stem cells.[3] BMI1 knockout in mice results in defects in hematopoiesis, skeletal patterning, and neurological functions.[4]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For continuous use, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing, or storage in “frost-free” freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 2-4 μg/mL is recommended using lysates of HEK-293T cells overexpressing human BMI1.

Immunoprecipitation: a working antibody amount of 2.5-5 μg is recommended using lysates of HEK-293T cells overexpressing human BMI1.

Immunofluorescence: a working antibody concentration of 1-2 μg/mL is recommended using paraformaldehyde fixed HEK-293T cells overexpressing human BMI1.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

1. Datta, S. et al., *Cancer Res.*, **67**, 10286-10295 (2007).
2. Park, I.K. et al., *Nature,* **423**, 302-305 (2003).
3. Molofsky, A.V. et al., *Nature*, **425**, 962-967 (2003).
4. Van der Lugt, N.M. et al., *Genes Dev.,* **8**, 757-769 (1994).

VS,SG,TD,KAA,PHC,MAM 06/19-1