

## AbFlex® BMI-1 antibody (rAb)

**Catalog Nos:** 91195, 91196

**RRID:** AB\_2793798

**Isotype:** IgG2a

**Application(s):** ChIP, ChIP-Seq, WB

**Reactivity:** Human, Mouse

**Quantities:** 100 µg, 10 µg

**Purification:** Protein A Chromatography

**Host:** Mouse

**Concentration:** 1 µg/µl

**Background:** AbFlex® antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. Each AbFlex antibody contains a 6xHis Tag, a Biotinylation Tag for enzymatic biotin conjugation using the biotin ligase, BirA, and a sortase recognition motif (LPXTG) to attach a variety of labels directly to the antibody including fluorophores, enzymatic substrates (HRP, AP), peptides, drugs as well as solid supports.

BMI-1 is a member of the Polycomb PRC1 complex that is recruited to transcriptionally repressed genes subsequent to histone H3 lysine 27 methylation in order to maintain repression. In the PRC1 complex, BMI-1 is required to stimulate the E3 ubiquitin-protein ligase activity of RNF2/RING2, resulting in the ubiquitylation of histone H2A at lysine 119. BMI-1 acts as an oncogene and cooperates with c-myc in the initiation of lymphoma. High levels of expression of BMI-1 are observed in metastatic melanoma, and BMI-1 has been implicated in several other cancers. BMI-1 is required for hematopoietic stem cell self renewal.

**Immunogen:** This antibody was raised against full length human BMI1 [BMI1 polycomb ring finger oncogene].

**Buffer:** Purified IgG in 140 mM Hepes, pH 7.5, 70 mM NaCl, 35 mM NaOAc, 0.07% sodium azide, 30% glycerol. Sodium azide is highly toxic.

### Application Notes:

Applications Validated by Active Motif:

ChIP-Seq: 4 µg per ChIP

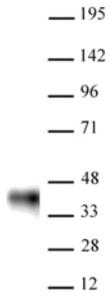
WB\*: 0.5-2 µg/ml dilution

\*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western Blot.

AbFlex® recombinant antibodies are genetically derived from DNA sequences of parental hybridoma clones. For details on the parental clone, see Catalog No. 39993.

**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



Western blot of AbFlex<sup>®</sup> BMI-1 antibody (rAb).

20 µg of K562 cell nuclear extract was run on SDS-PAGE and probed with AbFlex<sup>®</sup> BMI-1 antibody.

#### AbFlex<sup>®</sup> BMI-1 recombinant antibody (rAb) tested by ChIP-Seq

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT<sup>®</sup> High Sensitivity Kit (Cat. No. 53040) with 30 µg of mouse embryonic fibroblast (MEF) chromatin and 4 µg of BMI-1 antibody. ChIP DNA was sequenced on the Illumina NextSeq and 9.9 million sequence tags were mapped to identify BMI-1 binding sites on chromosome 2.

