

## **Bmi-1 Monoclonal Antibody**

Catalog No: YM0072

Reactivity: Human

**Applications:** WB;IHC;IF;FCM;ELISA

Target: Bmi-1

**Fields:** >>Signaling pathways regulating pluripotency of stem cells;>>Transcriptional

misregulation in cancer;>>MicroRNAs in cancer

Gene Name: BMI1

Protein Name: Polycomb complex protein BMI-1

Human Gene Id: 648

**Human Swiss Prot** P35226

No:

Mouse Swiss Prot P25916

No:

Immunogen: Purified recombinant fragment of human Bmi-1 expressed in E. Coli.

**Specificity:** Bmi-1 Monoclonal Antibody detects endogenous levels of Bmi-1 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

**Dilution:** WB 1:500 - 1:2000. IHC 1:200 - 1:1000. IF 1:200 - 1:1000. Flow cytometry:

1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.

**Purification :** Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 37kD

1/4



P References:

1. Mol Cancer. 2009 Nov 10;8:98.

2. Cancer Res. 2009 Dec 1;69(23):9090-5.

### **Background:**

BMI1 proto-oncogene, polycomb ring finger(BMI1) Homo sapiens 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],

#### **Function:**

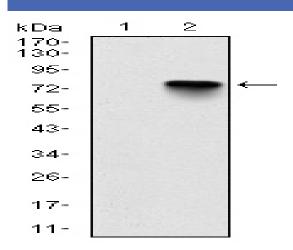
disease:Cooperates with the MYC oncogene to produce B-lymphomas.,function:Component of the Polycomb group (PcG) multiprotein PRC1 complex, a complex required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility. In the PRC1 complex, it is required to stimulate the E3 ubiquitin-protein ligase activity of RNF2/RING2.,PTM:May be polyubiquitinated; which does not lead to proteasomal degradation.,similarity:Contains 1 RING-type zinc finger.,subunit:Component of chromatin-associated class II polycomb repressive complex 1 (PRC1/hPRC-H) at least composed of PCGF2/RNF110, BMI1/PCGF4, CBX2/M33, CBX4/PC2, CBX8/PC3, PHC1, PHC2, PHC3, SCMH1, RING1 and R

# Subcellular Location:

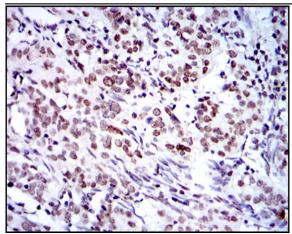
Nucleus . Cytoplasm .

**Expression:** Epithelium, Erythrocyte, Muscle, Thymus,

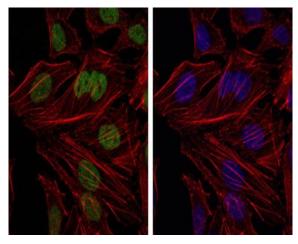
## **Products Images**



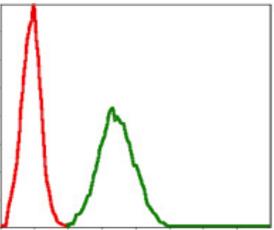
Western Blot analysis using Bmi-1 Monoclonal Antibody against HEK293 (1) and BMI1-hlgGFc transfected HEK293 (2) cell lysate.



Immunohistochemistry analysis of paraffin-embedded cervical cancer tissues with DAB staining using Bmi-1 Monoclonal Antibody.



Immunofluorescence analysis of Hela cells using Bmi-1 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of NIH/3T3 cells using Bmi-1 Monoclonal Antibody (green) and negative control (red).

