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Miz-1 Antibody

#9044 Store at -20C

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H M	Sensitivity: Endogenous	MW (kDa): 95	Source/Isotype: Rabbit	UniProt ID: #Q13105	Entrez-Gene Id: 7709
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Miz-1 Antibody recognizes endogenous levels of total Miz-1 protein. This antibody cross-reacts with a 60 kDa protein of unknown origin in some cell lines.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro158 of human Miz-1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Miz-1 (Zbtb17) is a poxvirus and zinc finger (POZ) transcription factor with an amino-terminal BTB/POZ domain and 13 carboxy-terminal zinc finger domains. Miz-1 plays a key role in cell cycle control through activation of the cyclin-dependent kinase inhibitors p15, INK4B, and p21 Waf1/Cip1 (1-4). The transcriptional activity of Miz-1 is repressed through direct interaction with Myc (1-4). In the presence of DNA damage, Myc is recruited to the p21 Waf1/Cip1 promoter by Miz-1 and blocks p53-mediated induction of p21 Waf1/Cip1, ultimately resulting in p53-mediated apoptosis rather than cell cycle arrest (4). Miz-1 also plays a role during lymphocyte development. In developing B and T cells, Miz-1 represses suppressor of cytokine signaling 1 (SOCS1) expression, which enables signaling through the IL-7 receptor and upregulation of the pro-survival protein Bcl-2 (5,6).

Background References

1. Peukert, K. et al. (1997) *EMBO J* 16, 5672-86.
2. Seoane, J. et al. (2001) *Nat Cell Biol* 3, 400-8.
3. Staller, P. et al. (2001) *Nat Cell Biol* 3, 392-9.
4. Seoane, J. et al. (2002) *Nature* 419, 729-34.
5. Kosan, C. et al. (2010) *Immunity* 33, 917-28.
6. Saba, I. et al. (2011) *Blood* 117, 3370-81.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse

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