

anti-c-Abl

Cat #: HM1002
Mouse monoclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

The Abl oncogene was initially identified as the viral transforming gene of Abelson murine leukemia virus (A-MuLV). The major translational product of c-Abl has been identified as a 120 kDa protein with tyrosine kinase activity and an SH2 domain. The Abl oncogene is implicated in several human leukemias including 90-95% of chronic myelocytic leukemia (CML), 20-25% of adult acute lymphoblastic leukemia (ALL) and 2-5% of pediatric ALL. In these leukemias the c-Abl proto-oncogene undergoes a (9;22) chromosomal translocation producing the Philadelphia (Ph1) chromosome. The translocation generates a chimeric Bcr/c-Abl mRNA encoding activated Abl protein-tyrosine kinase. The Bcr gene has been shown to encode a GTPase-activating protein (GAP) specific for the Ras-related GTP-binding protein, p21rac.

SPECIFICITY

This antibody specifically recognizes c-Abl p120 of human and mouse origin.

The antibody can be used in Western blotting, immunoprecipitation and immunostaining.

IMMUNOGEN

A recombinant protein at the carboxy terminal domain of c-Abl.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

1. Abelson, H.T., et al. 1970. Lymphosarcoma: virus-induced thymic-independent disease in mice. *Cancer Res.* 30: 2213-2222.
2. de Klein, A., et al. 1982. A cellular oncogene is translocated to the Philadelphia chromosome in chronic myelocytic leukemia. *Nature.* 300: 765-767.
3. Diekmann, D., et al. 1991. Bcr encodes a GTPase-activating protein for p21rac. *Nature.* 351: 400-402.
4. Li, B., Cong, F., Tan, C.P., Wang, S.X. and Goff, S.P. (2002) Aph2, a protein with a zf-DHHC motif, interacts with c-Abl and has pro-apoptotic activity. *J. Biol. Chem.* 277, 28870-28876.
5. Master, Z., Tran, J., Bishnoi, A., Chen, S.H., Ebos, J.M., Van Slyke, P., Kerbel, R.S. and Dumont, D.J. (2003) Dok-R binds c-Abl and regulates Abl kinase activity and mediates cytoskeletal reorganization. *J. Biol. Chem.* 278, 30170-30179.
6. Shaul, Y. and Ben-Yehoyada, M. (2005) Role of c-Abl in the DNA damage stress response. *Cell Res.* 15, 33-35.

7. Wei, G., Li, A.G. and Liu, X. (2005) Insights into selective activation of p53 DNA binding by c-Abl. *J. Biol. Chem.* 280, 12271-12278.
8. Raina, D., Pandey, P., Ahmad, R., Bharti, A., Ren, J., Kharbanda, S., Weichselbaum, R. and Kufe, D. (2005) c-Abl tyrosine kinase regulates caspase-9 autocleavage in the apoptotic response to DNA damage. *J. Biol. Chem.* 280, 11147-11151.
9. Yoshida, K., Yamaguchi, T., Natsume, T., Kufe, D. and Miki, Y. (2005) JNK phosphorylation of 14-3-3 proteins regulates nuclear targeting of c-Abl in the apoptotic response to DNA damage. *Nat. Cell Biol.* 7, 278-285.

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