



Mouse anti-Mouse ABL monoclonal antibody, clone 9F0 (CABT-B9171)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Recombinant Mouse Abl Gag Fusion Protein
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Dog, Human, Mouse, Rat, Chicken, Frog
Clone	9F0
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF; IP
Format	Liquid
Concentration	0.5 mg/ml
Size	100 µg
Buffer	Aqueous buffered solution containing ≤0.09% sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction The proto-oncogene c-abl was first isolated from the mouse genome as a gene with similarity to

the v-abl oncogene of Abelson murine leukemia virus. The c-abl gene encodes a protein tyrosine kinase that is localized in the cytoplasm and nucleus. The c-abl protein shares several common features with other cytoplasmic tyrosine kinases, including the src-homology domains 2 (SH2) and 3 (SH3). The SH2 domain is believed to bind specifically to tyrosine residues of other proteins. The function of the SH3 domain is still unclear. Unique to the c-abl tyrosine kinase is a large C-terminal segment which seems to be essential for its biological function, since mice homozygous for a C-terminal deletion of c-abl have multiple defects at birth. The C-terminal fragment of c-abl contains a DNA-binding domain, and the DNA-binding affinity of this domain seems to be regulated by phosphorylation of critical serine/threonine residues. The c-abl proto-oncogene can be activated in a variety of ways. For example, in Philadelphia chromosome (Ph1)-positive leukemias the c-abl proto-oncogene on chromosome 9 becomes fused to the bcr gene on chromosome 22, and bcr-abl fusion proteins are produced. Ph1-positive cells express either the a-typical 210 kDa bcr-abl fusion protein or a smaller 185 kDa bcr-abl fusion protein. The bcr sequences activate the c-abl tyrosine kinase by deregulating its expression, and actin filament-binding function associated with c-abl is also activated. Expression of bcr-abl fusion proteins in vitro leads to transformation of pre-B lymphoid cells supporting their role as an oncogene. The phosphorylated form of c-abl is observed at ~145 kDa on SDS/PAGE. The 8E9 clone has been reported to react with an epitope in the tyrosine kinase domain of murine abl proteins [Wang et al.].

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

Keywords

ABL1; c-abl oncogene 1, non-receptor tyrosine kinase; ABL; JTK7; p150; c-ABL; v-abl; c-ABL1; bcr/abl; tyrosine-protein kinase ABL1; proto-oncogene c-Abl; bcr/c-abl oncogene protein; Abelson tyrosine-protein kinase 1; c-abl oncogene 1, receptor tyrosine kinase; proto-oncogene tyrosine-protein kinase ABL1; v-abl Abelson murine leukemia viral oncogene homolog 1;

GENE INFORMATION

Entrez Gene ID [25](#)

UniProt ID [P00519](#)
