

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human c-Abl in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human c-Abl Ala941-Val1140 Accession # NP_009297
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Simple Western	10 µg/mL	See Below

DATA

Western Blot

Detection of Human c-Abl by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, MCF-7 human breast cancer cell line, and MDA-MB-453 human breast cancer cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human c-Abl Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5414) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for c-Abl at approximately 135 - 145 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western

Detection of Human c-Abl by Simple Western™. Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for c-Abl at approximately 149 kDa (as indicated) using 10 µg/mL of Goat Anti-Human c-Abl Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5414) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

c-Abl (Abelson murine leukemia viral homolog 1) is a cytosolic member of the ABL subfamily, protein tyrosine kinase family of enzymes. It is ubiquitously expressed, and participates in multiple processes such as cell migration, actin reorganization, DNA damage response and apoptosis. Human c-Abl (I-B) is 1149 amino acids (aa) in length. It is myristoylated on Gly2 and contains one SH3 domain (aa 80-140), an SH2 domain (aa 146-236), a protein kinase region (aa 261-512), three NLS's (aa 620-634; 726-739; 778-791), one DNA-binding region (aa 888-988), an NES motif (aa 1109-1119) and an actin F-binding domain (aa 1120-1149). There is one alternate splice form (I-A) that contains a 26 aa substitution for the N-terminal 45 amino acids. In chronic myelogenous leukemia, c-Abl is fused to the Bcr gene product, resulting in the production of a constitutively active tyrosine kinase.