Background: The c-Abl proto-oncogene encodes a nonreceptor protein tyrosine kinase that is ubiquitously expressed and highly conserved in metazoan evolution. c-Abl protein is distributed in both the nucleus and the cytoplasm of cells. It is implicated in regulating cell proliferation, differentiation, apoptosis, cell adhesion and stress responses (1-3). c-Abl kinase activity is increased in vivo by diverse physiological stimuli including integrin activation, PDGF stimulation and binding to c-Jun, Nck and RFX1 (2,4). The in vivo mechanism of regulation of c-Abl kinase activity is not completely understood. Tyr245 is located in the linker region between the SH2 and catalytic domains. This positioning is conserved among Abl family members. Phosphorylation of Tyr245 is involved in the activation of c-Abl kinase (5). In addition, phosphorylation of Tyr412, which is located in the kinase activation loop of c-Abl, is required for kinase activity (6).

Specificity/Sensitivity: c-Abl Antibody detects endogenous levels of Abl proteins.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence close to the carboxy-terminus of human c-Abl. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

Western blot analysis of extracts from various cell lines, using c-Abl Antibody.

**Applications**

- **W, IP**
- **Endogenous**

**Species Cross-Reactivity**

- **H, M, R**

**Molecular Wt.**

- 135 (c-Abl)
- 210 (Bcr-Abl)

**Source**

- Rabbit**

**Recommended Antibody Dilutions:**

- Western blotting 1:1000
- Immunoprecipitation 1:100

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

**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.

**Species cross-reactivity is determined by western blot.**

**Anti-rabbit secondary antibodies must be used to detect this antibody.**

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