



phospho c-Abl [pY245]. Rabbit Phosphorylation Site-Specific Antibody

BACKGROUND

c-Abl is a 140-150 kDa non-receptor protein tyrosine kinase whose precise functions are not known, but roles for Abl in growth factor and integrin signaling, cell cycle regulation, cytoskeletal reorganization, neurogenesis, and responses to DNA damage and oxidative stress have been suggested. c-Abl kinase activity is increased in vivo by diverse physiological stimuli including ionizing radiation, entry into S phase, integrin activation, and platelet-derived growth factor (PDGF) stimulation. c-Abl contains various protein binding domains that appear to enable it to regulate the functions of many proteins by forming complexes, most notably three isoforms of the oncogenic protein BCR/ABL. Tyrosine 245 is involved in the activation of c-Abl kinase activity, and phosphorylated by Src after PDGF stimulation.

IMMUNOGEN

The antiserum was produced against a chemically synthesized phosphopeptide derived from a region of human c-Abl that contains tyrosine 245. Note: there are two widely expressed forms of c-Abl produced by alternative splicing, known as 1a and 1b (the more commonly used form). The corresponding phosphorylation site from 1a is tyrosine

ORDERING INFORMATION

CATALOG NUMBER

X2014P

SIZE

10 blot μ g

FORM

Unconjugated

HOST/CLONE

Rabbit Clone Polyclonal

FORMULATION

Provided as solution in phosphate buffered saline, pH 7.3, with 1% BSA and 0.08% sodium azide

CONCENTRATION

See vial for concentration

ISOTYPE

APPLICATIONS

Western Blot

SPECIES REACTIVITY

Human

ACCESSION NUMBER

Human A3KFJ3

POSITIVE CONTROL/TISSUE EXPRESSION

Fibroblasts transfected with oncogenic Δ SH3-Abl.

COMMENTS

The antibody has been used for Western blotting applications. For Western blotting, we recommend using the antibody at 0.1-1.0 μ g/mL. At 0.50 μ g/mL, the dilution provides 100 mL working solution, which at 10 mL/blot allows 10 blots to be performed. The optimal antibody concentration should be determined for each specific application.

PURIFICATION

Purified from rabbit serum by sequential epitope-specific chromatography. The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the site of phosphorylation to remove antibody that is reactive with non-phosphorylated c-Abl. The final product is generated by affinity chromatography using a c-Abl

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -80°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Cong, F., et al. (2002) Interaction between UV-damaged DNA binding activity proteins and the c-Abl tyrosine kinase. *J. Biol. Chem.* 277(38):34870-34878.
2. Furstoss, O., et al. (2002) c-Abl is an effector of Src for growth factor-induced c-myc expression and DNA synthesis. *EMBO J.* 21(4):514-524.
3. Brasher, B.B. and R.A. Van Etten (2000) c-Abl has high intrinsic tyrosine kinase activity that is stimulated by mutation of the Src homology 3 domain and by autophosphorylation at two distinct regulatory tyrosines. *J. Biol. Chem.* 275(45):35631-35637.
4. Plattner, R., et al. (1999) c-Abl is activated by growth factors and Src family kinases and has a role in the cellular response to PDGF. *Genes Dev.* 13(18):2400-2411.

PRODUCT SPECIFIC REFERENCES