



Abl1 (phospho Tyr204) Monoclonal Antibody

Catalog No	YP-mAb-14357
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	ABL1
Protein Name	Tyrosine-protein kinase ABL1
Immunogen	The antiserum was produced against synthesized peptide derived from human Abl around the phosphorylation site of Tyr204. AA range:156-205
Specificity	Phospho-Abl1 (Y204) Monoclonal Antibody detects endogenous levels of Abl1 protein only when phosphorylated at Y204.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ABL1; ABL; JTK7; Tyrosine-protein kinase ABL1; Abelson murine leukemia viral oncogene homolog 1; Abelson tyrosine-protein kinase 1; Proto-oncogene c-Abl; p150
Observed Band	125(200kd BCR-ABL complex)
Cell Pathway	Cytoplasm, cytoskeleton. Nucleus. Mitochondrion . Shuttles between the nucleus and cytoplasm depending on environmental signals. Sequestered into the cytoplasm through interaction with 14-3-3 proteins. Localizes to mitochondria in response to oxidative stress (By similarity). ; [Isoform IB]: Nucleus membrane; Lipid-anchor. The myristoylated c-ABL protein is reported to be nuclear.
Tissue Specificity	Widely expressed.
Function	catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,cofactor:Magnesium or manganese.,disease:A chromosomal aberration involving ABL1 is a cause of chronic myeloid leukemia (CML) [MIM:608232]. Translocation t(9;22)(q34;q11) with BCR. The translocation produces a BCR-ABL found also in acute myeloid leukemia (AML) and acute lymphoblastic leukemia (ALL).,enzyme regulation:Stabilized in the inactive form by an association between the SH3 domain and the SH2-TK linker region, interactions of the amino-terminal cap, and contributions from an amino-terminal myristoyl group and phospholipids. Activated by autophosphorylation as well as



by SRC-family kinase-mediated phosphorylation. Activated by RIN1 binding to the SH2 and SH3 domains. Inhibited by imatinib mesylate (Gleevec) which is used for the treatment of chronic myeloid leukemia (CML).,function:Regulates

Background

This gene is a protooncogene that encodes a protein tyrosine kinase involved in a variety of cellular processes, including cell division, adhesion, differentiation, and response to stress. The activity of the protein is negatively regulated by its SH3 domain, whereby deletion of the region encoding this domain results in an oncogene. The ubiquitously expressed protein has DNA-binding activity that is regulated by CDC2-mediated phosphorylation, suggesting a cell cycle function. This gene has been found fused to a variety of translocation partner genes in various leukemias, most notably the t(9;22) translocation that results in a fusion with the 5' end of the breakpoint cluster region gene (BCR; MIM:151410). Alternative splicing of this gene results in two transcript variants, which contain alternative first exons that are spliced to the remaining common exons. [pr]

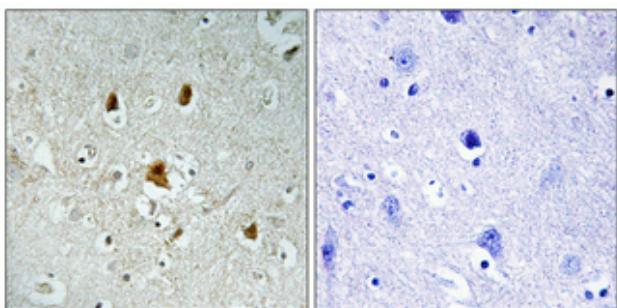
matters needing attention

Avoid repeated freezing and thawing!

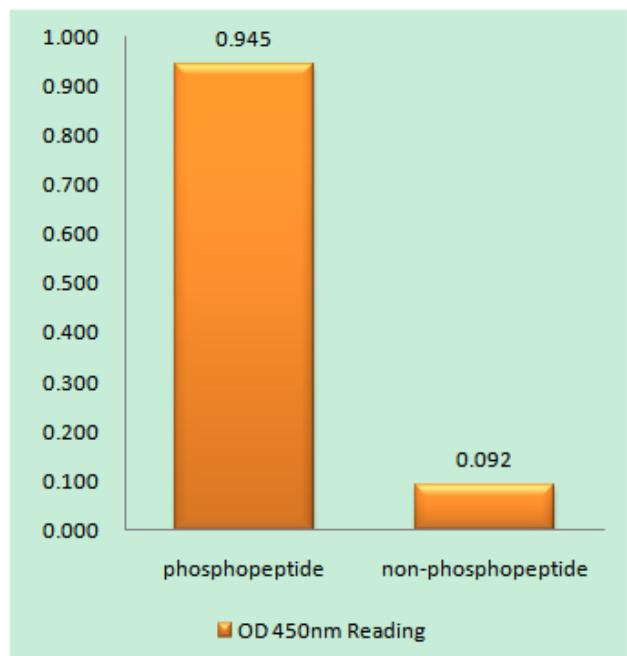
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

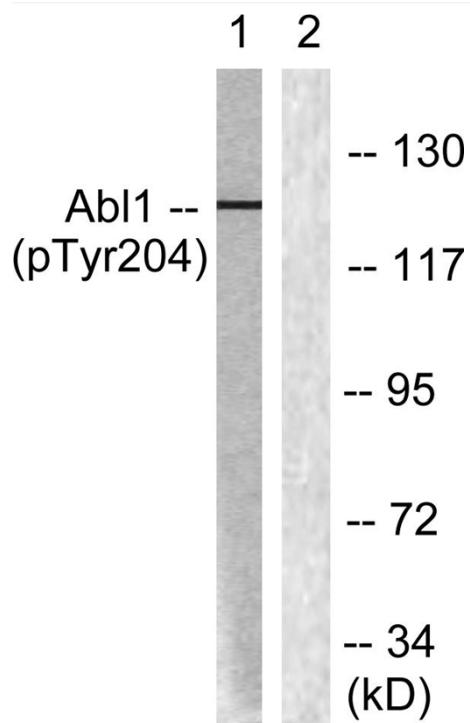
Products Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negtive contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Abl (Phospho-Tyr204) Antibody



Western blot analysis of lysates from COS7 cells treated with Adriamycin 0.5ug/ml 24h, using Ab1 (Phospho-Tyr204) Antibody. The lane on the right is blocked with the phospho peptide.