

Bcr (phospho Tyr177) Polyclonal Antibody

Catalog # AP66968

Product Information

Application WB Primary Accession P11274

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Calculated MW 142819

Additional Information

Gene ID 613

Other Names BCR; BCR1; D22S11; Breakpoint cluster region protein; Renal carcinoma

antigen NY-REN-26

Dilution WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

Protein Information

Name BCR (HGNC:1014)

Synonyms BCR1, D22S11

Function Protein with a unique structure having two opposing regulatory activities

toward small GTP-binding proteins. The C-terminus is a GTPase-activating protein (GAP) domain which stimulates GTP hydrolysis by RAC1, RAC2 and CDC42. Accelerates the intrinsic rate of GTP hydrolysis of RAC1 or CDC42, leading to down-regulation of the active GTP-bound form (PubMed:17116687, PubMed:1903516, PubMed:7479768). The central Dbl homology (DH) domain functions as guanine nucleotide exchange factor (GEF) that modulates the GTPases CDC42, RHOA and RAC1. Promotes the conversion of CDC42, RHOA and RAC1 from the GDP-bound to the GTP-bound form (PubMed:23940119, PubMed:7479768). The amino terminus contains an intrinsic kinase activity (PubMed:1657398). Functions as an important negative regulator of neuronal RAC1 activity (By similarity). Regulates macrophage functions such as CSF1-directed motility and phagocytosis through the modulation of RAC1

activity (PubMed:<u>17116687</u>). Plays a major role as a RHOA GEF in keratinocytes being involved in focal adhesion formation and keratinocyte

differentiation (PubMed: 23940119).

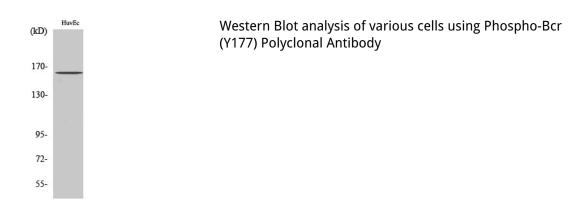
Cellular Location

Postsynaptic density {ECO:0000250|UniProtKB:Q6PAJ1}. Cell projection, dendritic spine {ECO:0000250|UniProtKB:Q6PAJ1}. Cell projection, axon {ECO:0000250|UniProtKB:Q6PAJ1}. Synapse {ECO:0000250|UniProtKB:F1LXF1}

Background

GTPase-activating protein for RAC1 and CDC42. Promotes the exchange of RAC or CDC42-bound GDP by GTP, thereby activating them. Displays serine/threonine kinase activity.

Images



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