



Mouse anti-Rat β PIX monoclonal antibody, clone 34/cQJY (CABT-B9367)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Immunogen	Rat β PIX aa. 351-453
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Rat, Mouse, Dog, Chicken
Clone	34/cQJY
Purification	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Conjugate	Unconjugated
Applications	WB; IF
Format	Liquid
Concentration	250 μ g/ml
Size	50 μ g
Buffer	Aqueous buffered solution containing BSA, glycerol, and $\leq 0.09\%$ sodium azide.
Storage	Store undiluted at -20°C.

BACKGROUND

Introduction	The activity of PAK family kinases is regulated through interaction with the small GTPases
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Cdc42 and Rac1. PAKs are activated by the GTP-bound form of Cdc-42 and Rac1, and recruitment of PAKs to focal complexes has been implicated in Cdc42- and Rac1-dependent regulation of focal contact formation. PAK-interacting exchange factor (PIX) was identified in a screen for proteins that bind PAKs. Two forms of PIX have been identified: an 85 kDa protein designated α PIX and a 78 kDa protein designated β PIX. These proteins have 80% identity in their overlapping regions, which include myosin-like, pleckstrin (PH), Dbl (DH), and SH3 domains. In addition, α PIX contains a calponin-like domain at the N-terminus. The expression of β PIX is ubiquitous, while α PIX is expressed in heart, muscle, and thymus. PIX can act as a guanine nucleotide exchange factor for Rac1 and co-transfection of β PIX, Cdc42, and α PAK results in increased α PAK activity. PIX binding to PAK is required for localization of PAKs to focal complexes and injection of β PIX leads to Rac1-dependent membrane ruffling. Thus, PIX is important for PAK localization and activity during small GTPase-dependent regulation of cell morphology.

Keywords

ARHGEF7; Rho guanine nucleotide exchange factor (GEF) 7; P50; P85; PAK3; PIXB; COOL1; P50BP; COOL-1; P85SPR; BETA-PIX; P85COOL1; Nbla10314; rho guanine nucleotide exchange factor 7; PAK-interacting exchange factor beta; guanine nucleotide exchange factor 7; SH3 domain-containing proline-rich protein;

GENE INFORMATION

Entrez Gene ID

[8874](#)

UniProt ID

[Q14155](#)
