

PRODUCT DATA SHEET

Bioworld Biotech Co., Ltd

PAK1 (Phospho-S199) polyclonal antibody

Catalog: BS64537 Host: Rabbit Reactivity: Human, Mouse, Rat

BackGround:

The p21-activated kinase (PAK) family ine/threonine kinases is engaged in multiple cellular processes, including cytoskeletal reorganization, MAPK signaling, apoptotic signaling, control of phagocyte NADPH oxidase, and growth factor-induced neurite outgrowth (1,2). Several mechanisms that induce PAK activity have been reported. Binding of Rac/Cdc42 to the CRIB (or PBD) domain near the amino terminus of PAK causes autophosphorylation and conformational changes in PAK (1). Phosphorylation of PAK1 at Thr423 by PDK induces activation of PAK1 (3). Several autophosphorylation sites have been identified, including Ser199 and Ser204 of PAK1 and Ser192 and Ser197 of PAK2 (4,5). Because the autophosphorylation sites are located in the amino-terminal inhibitory domain, it has been hypothesized that modification in this region prevents the kinase from reverting to an inactive conformation (6). Research indicates that phosphorylation at Ser144 of PAK1 or Ser139 of PAK3 (located in the kinase inhibitory domain) affects kinase activity (7). Phosphorylation at Ser21 of PAK1 or Ser20 of PAK2 regulates binding with the adaptor protein Nck (8). PAK4, PAK5, and PAK6 have lower sequence similarity with PAK1-3 in the amino-terminal regulatory region (9). Phosphorylation at Ser474 of PAK4, a site analogous to Thr423 of PAK1, may play a pivotal role in regulating the activity and function of PAK4 (10).

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

~ 61 kDa

Swiss-Prot:

Q13153

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB:1:500~1:1000 IHC:1:50~1:200

Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at $-20\,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

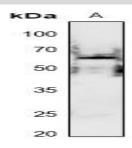
Specificity:

PAK1

pho-S199) polyclonal antibody detects endogenous levels of PAK1 protein only when phosphorylated at Ser199.

(Phos-

DATA:



Western blot (WB) analysis of PAK1 (Phospho-S199) polyclonal antibody at 1:500 dilution

LaneA: The Brain tissue lysate of Mouse

Note:

For research use only, not for use in diagnostic procedure.

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