

**bs-2277R****[ Primary Antibody ]****PAK1 Rabbit pAb****Bioss**  
**ANTIBODIES**

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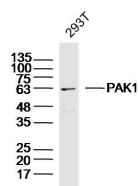
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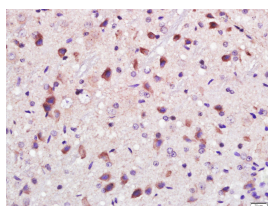
400-901-9800

**— DATASHEET —**

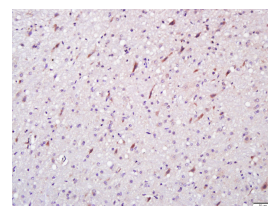
<b>Host:</b> Rabbit	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000) <b>IHC-P</b> (1:100-500) <b>IHC-F</b> (1:100-500) <b>IF</b> (1:100-500) <b>ICC/IF</b> (1:50)  <b>Reactivity:</b> Human, Rat (predicted: Mouse, Rabbit, Dog)  <b>Predicted MW.:</b> 60 kDa  <b>Subcellular Location:</b> Cell membrane ,Cytoplasm
<b>Clonality:</b> Polyclonal		
<b>GeneID:</b> 5058	<b>SWISS:</b> Q13153	
<b>Target:</b> PAK1		
<b>Immunogen:</b> KLH conjugated synthetic peptide derived from human PAK1: 201-300/545.		
<b>Purification:</b> affinity purified by Protein A		
<b>Concentration:</b> 1mg/ml		
<b>Storage:</b> 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.		
<b>Background:</b> The p21 activated kinases (PAK) are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. The PAK proteins are a family of serine/threonine kinases that serve as targets for the small GTP binding proteins, CDC42 and RAC1, and have been implicated in a wide range of biological activities. The protein encoded by this gene is activated by proteolytic cleavage during caspase-mediated apoptosis, and may play a role in regulating the apoptotic events in the dying cell. P21-activated kinase (PAK) is actually a family of serine/threonine protein kinases, members of which are activated by small molecular weight GTPases. The three most common isoforms are PAK 1, PAK 2, and PAK 3 (also known as alpha PAK, gamma PAK, and beta PAK, respectively). These kinases contain numerous regulatory elements that trigger diverse signaling processes such as those initiated by activated GTPases, interaction with Src homology 3 (SH3) domains, and caspase mediated proteolytic cleavage. Autophosphorylation of serine 141 (serine 144 for PAK 1 and serine 139 PAK 3), catalyzed by Cdc42, is required for activation of PAK.		

**— VALIDATION IMAGES —**

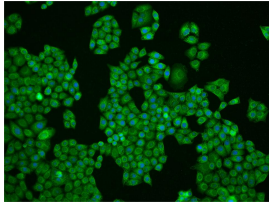
Sample: 293T (Human) Cell Lysate at 40 ug  
Primary: Anti-PAK1 (bs-2277R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 60 kD  
Observed band size: 60 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAK1) Polyclonal Antibody, Unconjugated (bs-2277R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAK1) Polyclonal Antibody, Unconjugated (bs-2277R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



MCF7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (PAK1) polyclonal Antibody, Unconjugated (bs-2277R) 1:25, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.

## — SELECTED CITATIONS —

- **[IF=4.8]** Chengquan Han. et al. Integrated network pharmacology, molecular docking and in vivo experiments to elucidate the extenuative mechanisms of ginseng polysaccharide against Toxoplasma gondii-induced testicular toxicity. *international immunopharmacology*. 2025 Feb 20;148:114147. Western blot ;Mouse. 39862631
- **[IF=4.3]** Qinqing Xue. et al. Lycorine (Lycoris radiata)—a unique natural medicine on breast cancer. *J CELL MOL MED*. 2024 Aug;28(16):e70032 WB ;Human. 39175104
- **[IF=2.894]** Wufuer R et al. Downregulation of Rac1/PAK1/LIMK1/cofilin signaling pathway in colon cancer SW620 cells treated with Chlorin e6 photodynamic therapy. *Photodiagnosis Photodyn Ther*. 2020 Dec 8;102:143. WB ;Human. 33307230
- **[IF=2.5]** Chenlei Li. et al. Plexin D1 Negatively Regulates Macrophage-derived Foam Cell Migration via the Focal Adhesion Kinase/Paxillin Pathway. *BIOCHEM BIOPH RES CO*. 2024 Jun;:150236 WB ;Mouse. 38897039