

**bs-5570R****[ Primary Antibody ]****phospho-PI3KCA (Tyr317) Rabbit pAb****BioSS**  
**ANTIBODIES**

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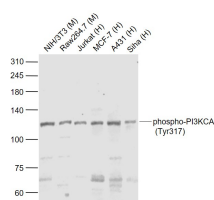
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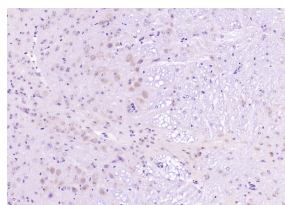
400-901-9800

**— DATASHEET —**

<b>Host:</b> Rabbit	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000)
<b>Clonality:</b> Polyclonal		<b>IHC-P</b> (1:100-500)
<b>GeneID:</b> 5290	<b>SWISS:</b> P42336	<b>IHC-F</b> (1:100-500)
<b>Target:</b> phospho-PI3KCA (Tyr317)		<b>IF</b> (1:100-500)
<b>Immunogen:</b> KLH conjugated Synthesised phosphopeptide derived from human PI3KCA around the phosphorylation site of Tyr317: TP(p-Y)MN.		<b>Reactivity:</b> Human, Mouse (predicted: Rat)
<b>Purification:</b> affinity purified by Protein A		
<b>Concentration:</b> 1mg/ml		<b>Predicted MW.:</b> 124 kDa
<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>Subcellular Location:</b> Cytoplasm
<b>Background:</b> PI3-Kinases (PI3-Ks) are a family of lipid kinases that are implicated in signal transduction. Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa catalytic subunit. The p85 subunit localize PI3-K activity to the plasma membrane while the p110 subunit contains the catalytic domain of PI3-K which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdInsP2. Four isoforms of p110 has been found; alpha, beta, gamma, and the delta subunit. The alpha isoform, also known as PI3KCA, is a transforming oncogene that was shown to have activating mutations in nine types of cancers such as colon, brain, breast and stomach.		

**— VALIDATION IMAGES —**

Sample: Lane 1: NIH/3T3 (Mouse) Cell Lysate at 30 ug  
 Lane 2: Raw264.7 (Mouse) Cell Lysate at 30 ug  
 Lane 3: Jurkat (Human) Cell Lysate at 30 ug  
 Lane 4: MCF-7 (Human) Cell Lysate at 30 ug  
 Lane 5: A431 (Human) Cell Lysate at 30 ug  
 Lane 6: SiHa (Human) Cell Lysate at 30 ug  
 Primary: Anti-phospho-PI3KCA (Tyr317) (bs-5570R) at 1/1000 dilution  
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
 Predicted band size: 110/120 kD  
 Observed band size: 110 kD



Paraformaldehyde-fixed, paraffin embedded (mouse 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 (phospho-PI3KCA (Tyr317)) Polyclonal Antibody, Unconjugated (bs-5570R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

**— SELECTED CITATIONS —**

- **[IF=11.161]** Chi, Ming. et al. TEAD4 functions as a prognostic biomarker and triggers EMT via PI3K/AKT pathway in bladder cancer. J EXP CLIN CANC RES. 2022 Dec;41(1):1-20 WB ;Human. 35581606
- **[IF=8.7]** Xue Sun. et al. An injectable shape-adaptive hydrogel system for subconjunctival injuries: In situ and permanently releases rapamycin to prevent fibrosis via promoting autophagy. MATER TODAY BIO. 2025 Feb;30:101380 IF, WB ;Human. 39790484

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

- **[IF=8.101]** Zhao Yin. et al. Targeting ABCB6 with nitidine chloride inhibits PI3K/AKT signaling pathway to promote ferroptosis in multiple myeloma. FREE RADICAL BIO MED. 2023 Jul;203:86 WB ;Human,Mouse. 37044150
- **[IF=7.701]** Liu, Zhu. et al. Comprehensive transcriptomic profiling and mutational landscape of primary gastric linitis plastica. GASTRIC CANCER. 2022 Nov;;1-17 WB ;Human. 36450891
- **[IF=6.575]** Xin Liu. et al. Overexpression of YEATS2 Remodels the Extracellular Matrix to Promote Hepatocellular Carcinoma Progression via the PI3K/AKT Pathway. CANCERS. 2023 Jan;15(6):1850 WB ;Human. 36980736