bs-2067R **[Primary Antibody]**

PIK3CA Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 5290 **SWISS:** P42336

Target: PIK3CA

Immunogen: KLH conjugated synthetic peptide derived from human PI3KCA: 961-1068/1068.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 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.

Background: 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.

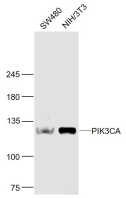
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
ICC/IF (1:100)

Reactivity: Human, Mouse, Rat (predicted: Rabbit, Cow, Chicken)

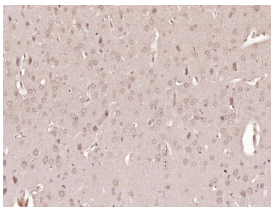
Predicted MW.: 124 kDa

Subcellular Location: Cytoplasm

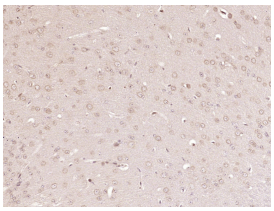
VALIDATION IMAGES



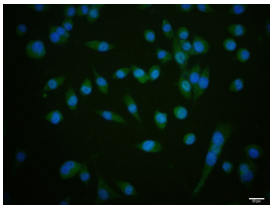
Sample: SW480 (Human) Cell Lysate at 30 ug NIH/3T3(Mouse) Cell Lysate at 30 ug Primary: Anti- PIK3CA (bs-2067R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 124 kD Observed band size: 124 kD



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 (PIK3CA) Polyclonal Antibody, Unconjugated (bs-2067R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



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 (PIK3CA) Polyclonal Antibody, Unconjugated (bs-2067R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



NIH/3T3 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 (PIK3CA) polyclonal Antibody, Unconjugated (bs-2067R) 1:100, 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=13.3]** Zhihe Yun. et al. Neural-enhancing PRP/Alg/GelMA triple-network hydrogel for neurogenesis and angiogenesis after spinal cord injury via PI3K/AKT/mTOR signaling pathway. THERANOSTICS. 2025 Mar;15(9):3837 WB ;Rat. 40213674
- **[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
- **[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=8.3]** MorinGabriel. et al. Somatic PIK3R1 mutations in the iSH2 domain are accessible to PI3Kα inhibition. EMBO MOL MED. 2025 五月 19 ;. 40389643