

For Research Use Only

# Phospho-GSK3A (Tyr279)/GSK3B (Tyr216) Recombinant monoclonal antibody

Catalog Number: 82371-5-RR



## Basic Information

**Catalog Number:**

82371-5-RR

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

BC000251

**GeneID (NCBI):**

2932

**UNIPROT ID:**

P49841

**Full Name:**

glycogen synthase kinase 3 beta

**Calculated MW:**

433 aa, 48 kDa

**Observed MW:**

48-50 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

242663E11

**Recommended Dilutions:**

WB: 1:5000-1:50000

FC (Intra): 0.25 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

**Tested Applications:**

WB, FC (Intra), ELISA

**Species Specificity:**

human, mouse

**Positive Controls:**

WB : HEK-293 cells, NIH/3T3 cells

FC (Intra) : λ phosphatase treated HEK-293 cells,

## Background Information

Glycogen synthase kinase 3 (GSK3) proteins are serine/threonine kinases that were originally identified as key regulatory enzymes in glucose metabolism. There are two isoforms, GSK3 alpha and GSK3 beta, that are encoded by separate genes and that are 85% homologous to each other overall with 95% homology in the kinase domains. GSK3 beta is activated by phosphorylation of the tyrosine 216 residue (Tyr216) located in the kinase domain and inactivated by phosphorylation of the amino-terminal serine 9 residue (Ser9). GSK3 phosphorylation inhibits its catalytic activity towards its substrates, allowing cytosolic stabilization and nuclear translocation of the transcriptional targets, β-catenin and Nrf2. (PMID: 31354196, PMID: 25750704, PMID: 24722055)

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

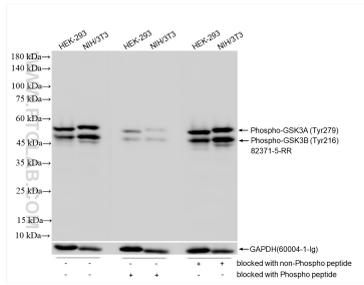
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E: Proteintech-CN@ptglab.com

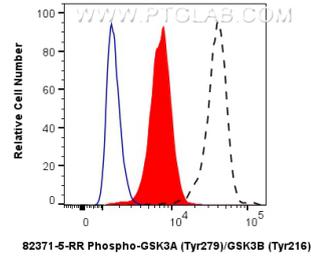
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## Selected Validation Data



HEK-293 cells and NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 82371-5-RR (Phospho-GSK3A (Tyr279)/GSK3B (Tyr216) antibody) blocked with BSA only, Phospho-GSK3A (Tyr279)/GSK3B (Tyr216) peptide or non-Phospho peptide at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with GAPDH Monoclonal antibody (60004-1-Ig) as loading control.



$1 \times 10^6$  HEK-293 cells untreated (dashed lines) or treated with  $\lambda$  phosphatase which intracellularly stained with 0.25  $\mu$ g Phospho-GSK3A (Tyr279)/GSK3B (Tyr216) Recombinant monoclonal antibody (82371-5-RR, Clone:242663E11) and CoraLite<sup>®</sup> 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25  $\mu$ g Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 90% MeOH.