

For Research Use Only

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

Catalog Number: 82371-5-RR



Basic Information

Catalog Number:

82371-5-RR

Size:

100ul, Concentration: 1000 µg/ml by Nanodrop;

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 10⁶ 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

*** 20ul sizes contain 0.1% BSA

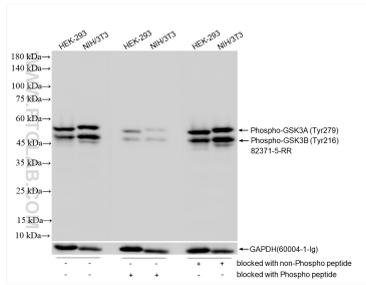
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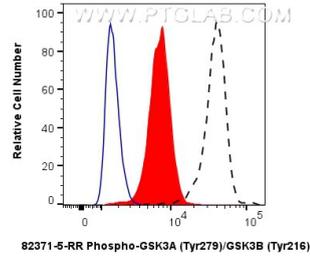
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Selected Validation Data



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.



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