Phospho-GSK3 beta(Ser 9) Rabbit mAb

Catalog No: #13356

Package Size: #13356-1 50ul #13356-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

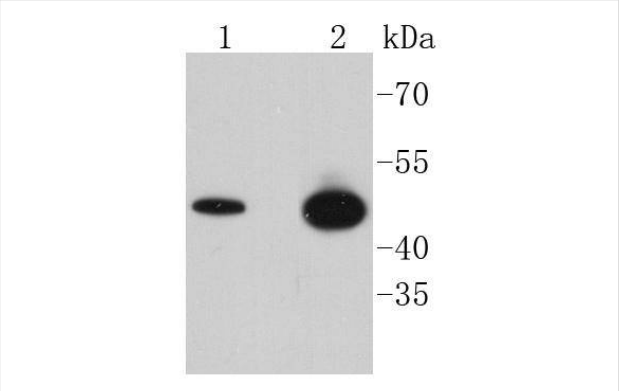
Description

Product Name	Phospho-GSK3 beta(Ser 9) Rabbit mAb
Host Species	Rabbit
Clonality	Monoclonal
Clone No.	SY02-71
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Hu
Immunogen Description	Synthetic phospho-peptide corresponding to residues surrounding Ser9 of human GSK3 beta.
Other Names	Glycogen Synthase Kinase 3 Beta antibody Glycogen synthase kinase-3 beta antibody GSK 3 beta antibody GSK-3 beta antibody GSK3B antibody GSK3B_HUMAN antibody GSK3beta isoform antibody Serine/threonine-protein kinase GSK3B antibody
Accession No.	Swiss-Prot#:P49841
Uniprot	P49841
GeneID	2932;
Calculated MW	47 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

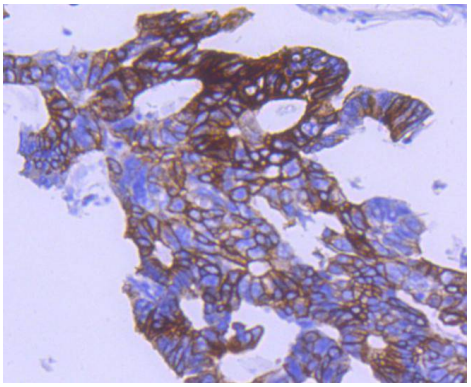
Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200ICC: 1:50-1:200

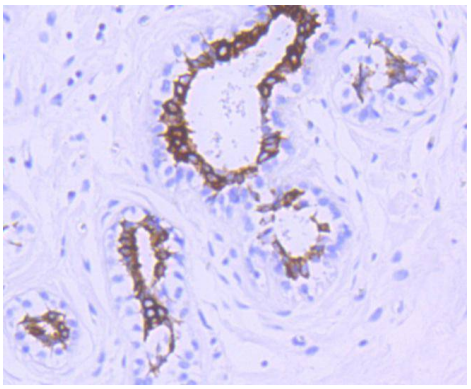
Images



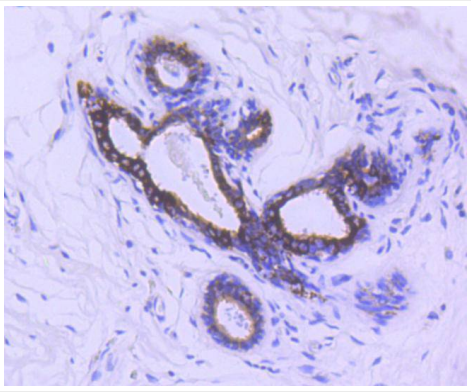
Western blot analysis of Phospho-GSK3 beta(Ser 9) on different lysates using anti-Phospho-GSK3 beta(Ser 9) antibody at 1/1,000 dilution. Positive control:
Lane 1: Hela
Lane 2: MCF-7



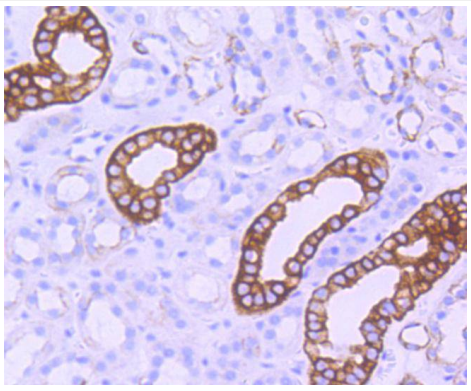
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-Phospho-GSK3 beta(Ser 9) antibody. Counter stained with hematoxylin.



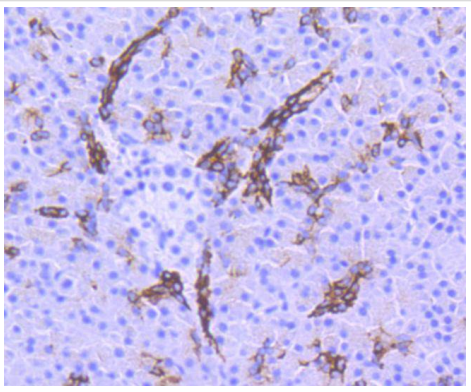
Immunohistochemical analysis of paraffin-embedded human breast tissue using anti-Phospho-GSK3 beta(Ser 9) antibody. Counter stained with hematoxylin.



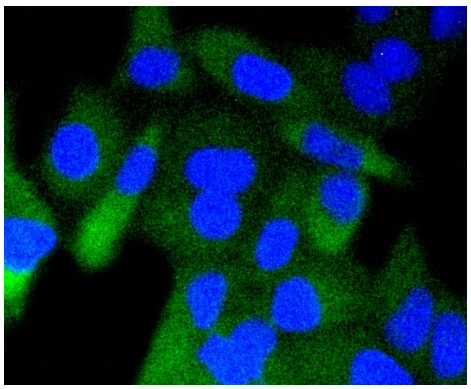
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using anti-Phospho-GSK3 beta(Ser 9) antibody. Counter stained with hematoxylin.



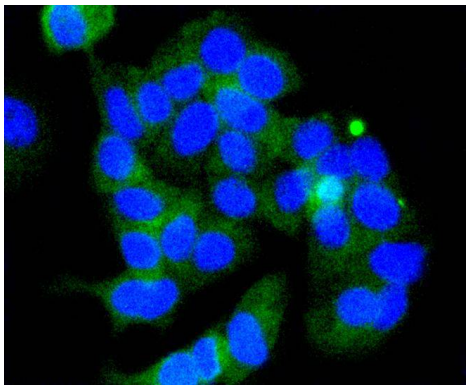
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Phospho-GSK3 beta(Ser 9) antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded human pancreas tissue using anti-Phospho-GSK3 beta(Ser 9) antibody. Counter stained with hematoxylin.



ICC staining Phospho-GSK3 beta(Ser 9) in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Phospho-GSK3 beta(Ser 9) in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

Glycogen synthase kinase-3α (GSK-3α) and GSK-3β are highly similar isoforms of serine/ threonine kinases that regulate metabolic enzymes and transcription factors, which are responsible for coordinating processes such as glycogen synthesis and cell adhesion. GSK-3β activity is also required for nuclear activity of Rel dimers, which mediate an anti-apoptotic response to TNFα in mice. GSK-3 catalytic kinase activity is controlled through differential phosphorylation of serine/threonine residues, which have an inhibitory effect, and tyrosine residues, which have an activating effect. Growth factor stimulation of mammalian cells expressing GSK-3α and GSK-3β induces phosphorylation of Ser 21 and Ser 9, respectively, through a phosphatidylinositol 3-kinase (PI 3-K)-protein kinase B (PKB)-dependent pathway, thereby enhancing proliferative signals. Additionally, GSK-3 physically associates with cAMP-dependent protein kinase A (PKA), which phosphorylates Ser 21 of GSK-3α or Ser 9 of GSK-3β and inactivates both forms. GSK-3α/β is positively regulated by phosphorylation on Tyr 279 and Tyr 216, respectively. Activated GSK-3α/β participates in energy metabolism, neuronal cell development, and body pattern formation. Tyrosine dephosphorylation of GSK-3 is involved in its extracellular signal-dependent inactivation.

References

Note: This product is for in vitro research use only