

RACO0521

Product Information

Size:

50ul

Reactivity:

Human

Source:

Homo sapiens (Human)

Isotype:

Rabbit IgG

Applications:

ELISA, WB, IHC, IF

Recommended dilutions:

WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200

Protein Background:

Constitutively active protein kinase that acts as a negative regulator in the hormonal control of glucose homeostasis, Wnt signaling and regulation of transcription factors and microtubules, by phosphorylating and inactivating glycogen synthase (GYS1 or GYS2), EIF2B, CTNNB1/beta-catenin, APC, AXIN1, DPYSL2/CRMP2, JUN, NFATC1/NFATC, MAPT/TAU and MACF1. Requires primed phosphorylation of the majority of its substrates. In skeletal muscle, contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis. May also mediate the development of insulin resistance by regulating activation of transcription factors. Regulates protein synthesis by controlling the activity of initiation factor 2B (EIF2BE/EIF2B5) in the same manner as glycogen synthase.

Gene ID:

GSK3B

Uniprot

P49841

Synonyms:

Glycogen synthase kinase-3 beta (GSK-3 beta) (EC 2.7.11.26) (Serine/threonine-protein kinase GSK3B) (EC 2.7.11.1), GSK3B

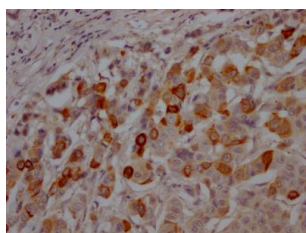
Immunogen:

A synthesized peptide derived from human GSK3 beta.

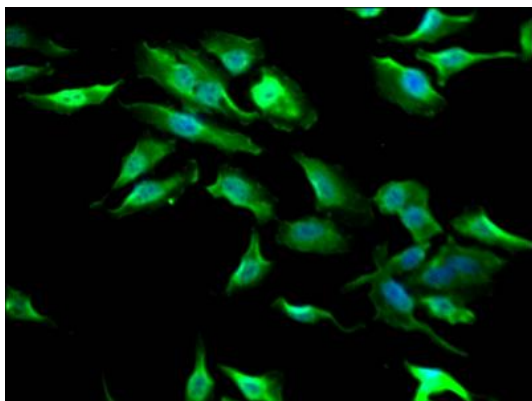
Storage:

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

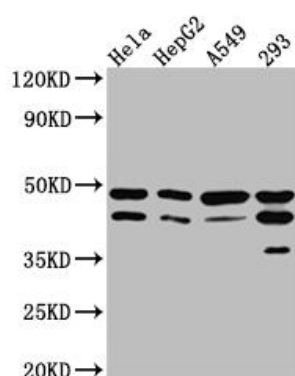
Product Images



IHC image of RACO0521 diluted at 1:100 and staining in paraffin-embedded human breast cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of HeLa Cells with RACO0521 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).



Western Blot

Positive WB detected in (HeLa whole cell lysate) HepG2 whole cell lysate) A549 whole cell lysate) 293 whole cell lysate) All lanes: GSK3 beta Antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1:50000 dilution

Predicted band size: 47, 49 kDa

Observed band size: 47 kDa