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## Phospho-Glycogen synthase 1 (Ser641) Rabbit pAb

Catalog Number: bs-3190R

Target Protein: Phospho-Glycogen synthase 1 (Ser641)

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500)

Reactivity: Mouse (predicted:Human, Rat, Rabbit, Pig, Cow, Dog, Cat, Horse)

Predicted MW: 85 kDa

Entrez Gene: 2997

Swiss Prot: P13807

Source: KLH conjugated Synthesised phosphopeptide derived from human Glycogen synthase 1 around the phosphorylation site of Ser641: PA(p-S)VP.

Purification: affinity purified by Protein A

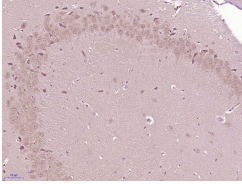
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Glycogen Synthase (GS) is a key enzyme in the regulation of glycogen metabolism. GS catalyzes the incorporation of UDP-glucose incorporation into glycogen. The activity of glycogen synthase is regulated by hormonal stimuli (insulin, catecholamines and glucagons) and non-hormonal stimuli (blood glucose level and exercise). Two main isoforms of mammalian GS are designated as muscle (glycogen synthase 1) and liver (glycogen synthase 2). Most tissues express glycogen synthase 1, whereas glycogen synthase 2 appears to be tissue-specific. The two isoforms have 70% identical amino acid sequence. Glycogen synthase can be phosphorylated by multiple kinases including glycogen synthase kinase-3 (GSK-3), mitogen-activated protein kinase-related protein kinase (DYRK), and SAPK2b/p38b which leads to its inactivation.

### VALIDATION IMAGES

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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 (Phospho-Glycogen synthase 1(Ser641)) Polyclonal Antibody, Unconjugated (bs-3190R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

## PRODUCT SPECIFIC PUBLICATIONS

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[IF=6.117] Jiao Mo. et al. Hepatic Leucine Carboxyl Methyltransferase 1 (LCMT1) contributes to high fat diet-induced glucose intolerance through regulation of glycogen metabolism. J NUTR BIOCHEM. 2023 Mar;;109321 WB ; Mouse . 36963730