

## Glycogen synthase 1(Phospho-S645) polyclonal antibody

Catalog: BCP00826

Host: Rabbit

Reactivity: Human,Rat

### BackGround:

Glycogen is a polysaccharide of glucose and serves as an energy storage in mammalian muscle and liver. Glycogen synthase catalyzes the rate-limiting step of glycogen biosynthesis and has two major isoforms in mammals -- muscle isoform (GYS1) and liver isoform (GYS2) respectively. Glycogen synthase kinase-3 $\alpha$  (GSK-3 $\alpha$ ) and glycogen synthase kinase-3 $\beta$  (GSK-3 $\beta$ ) phosphorylate glycogen synthase at multiple sites in its C-terminus (Ser641, Ser645, Ser649 and Ser653) inhibiting its activity. Hypoxia alters glycogen metabolism including temporal changes of GYS1 expression and phosphorylation in cancer cells, suggesting the role of metabolic reprogramming of glycogen metabolism in cancer growth.

### Product:

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.3.

### Molecular Weight:

~ 90 kDa

### Swiss-Prot:

P13807

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:1000~1:2000

### Storage&Stability:

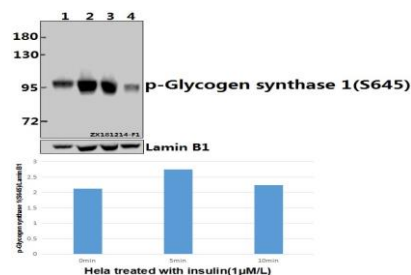
Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

Glycogen synthase 1(Phospho-S645) polyclonal antibody

detects endogenous levels of Glycogen synthase 1 protein only when phosphorylated at Ser645.

### DATA:



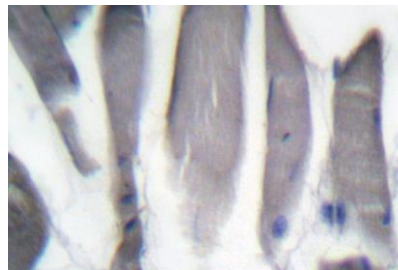
Western blot (WB) analysis of Glycogen synthase 1(Phospho-S645) polyclonal antibody at 1:500 dilution

Lane1:Hela whole cell lysate(40ug)

Lane2:Hela treated with insulin(1 μM/L,5 minutes) whole cell lysate(40ug)

Lane3:Hela treated with insulin(1 μM/L,10 minutes) whole cell lysate(40ug)

Lane4:The Stomach tissue lysate of Rat(40ug)



### Note:

For research use only, not for use in diagnostic procedure.