

Product Datasheet

GSK3 Alpha(Ser21) Polyclonal Antibody GRP554

Description

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), CTNNB1/beta-catenin, APC and AXIN1. Requires primed phosphorylation of the majority of its substrates. Contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis. Regulates glycogen metabolism in liver, but not in muscle. May also mediate the development of insulin resistance by regulating activation of transcription factors. In Wnt signaling, regulates the level and transcriptional activity of nuclear CTNNB1/beta-catenin. Facilitates amyloid precursor protein (APP) processing and the generation of APP-derived amyloid plaques found in Alzheimer disease. May be involved in the regulation of replication in pancreatic beta-cells. Is necessary for the establishment of neuronal polarity and axon outgrowth. Through phosphorylation of the anti-apoptotic protein MCL1, may control cell apoptosis in response to growth factors deprivation.

Species/Host

Rabbit

Reactivity

Human, Mouse, Rat

Conjugation

Unconjugated

Tested Applications

IHC-P, WB

Immunogen

KLH conjugated synthetic phosphopeptide derived from human GSK3 Alpha around the phosphorylation site of Ser21 (public_immunogen_range: 1-50/483)

Form/Appearance

Aqueous buffered solution containing 1% BSA, 50% glycerol and 0.09% sodium azide.

Concentration

1ug/ul

Storage

Store at -20°C for 12 months.

Note

For research use only.

Isotype

IgG

Clonality

Polyclonal

Purity

Purified by Protein A.

Uniprot ID

P49840

Entrez

2931

Dilution Range

WB: 1:300-1000, IHC-P: 1:200-400

