

磷酸化糖原合酶激酶-3 α 抗体

产品货号： mlR4692

英文名称： phospho-GSK3 Alpha (Ser21)

中文名称： 磷酸化糖原合酶激酶-3 α 抗体

别名： GSK3 Alpha (phospho-Ser21); GSK3 Alpha (phospho Ser21); GSK3 Alpha (phospho S21); Gsk3a; GSK 3 alpha; GSK-3 alpha; GSK3 alpha; Glycogen synthase kinase-3 alpha; GSK 3 alpha; DKFZp686D0638; GSK 3A; GSK3A; GSK3alpha; GSK3A_HUMAN; Glycogen synthase kinase 3 alpha; Serine/threonine-protein kinase GSK3A.

产品类型： 磷酸化抗体

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Chicken, Dog, Pig, Horse,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 (石蜡切片需做抗原修复)

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分子量：54kDa

细胞定位：细胞浆

性状：Lyophilized or Liquid

浓度：1mg/ml

免疫原：KLH conjugated synthesised phosphopeptide derived from human GSK3 Alpha around the phosphorylation site of Ser21:TS(p-S)FA

亚型：IgG

纯化方法：affinity purified by Protein A

储存液：0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件：Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

PubMed：PubMed

产品介绍： Glycogen synthase kinase 3 alpha belongs to the Ser/Thr family of protein kinases, Cdc2/cdkx subfamily; GSK3 subsubfamily. It is implicated in the hormonal control of several regulatory proteins including glycogen synthase, myb, and the transcription factor c jun. GSK3 phosphorylates glycogen synthase and thereby inactivates it. Insulin stimulates the dephosphorylation of glycogen synthase at the sites phosphorylated by GSK3 and subsequently inhibits GSK3 acutely leading to the stimulation of glycogen synthesis. GSK3 signaling is performed by two isoforms, GSK3 alpha and GSK3 beta. The two isoforms share 97% sequence similarity within their catalytic domains. GSK3 has also been shown to play a role in protein synthesis, cell adhesion, cell proliferation, cell differentiation, microtubule dynamics and cell motility.

Function:

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.

Subunit:

Monomer. Interacts with ARRB2. Interacts with AXIN1 and CTNNB1/beta-catenin.

Post-translational modifications:

Phosphorylated by AKT1 at Ser-21: upon insulin-mediated signaling, the activated PKB/AKT1 protein kinase phosphorylates and desactivates GSK3A, resulting in the dephosphorylation and activation of GYS1. Activated by phosphorylation at Tyr-279

Similarity:

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. GSK-3 subfamily.

Contains 1 protein kinase domain.

SWISS:

P49840

Gene ID:

2931

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

GSK-3 α 和 GSK-3 β ，在细胞和组织中广泛存在，参与多个信号通路的排列，包括糖原合成和细胞黏附作用。

产品图片

