Datasheet for ABIN7127696

Recombinant anti-GSK3 alpha antibody (pTyr216, pTyr279)

1 Image

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Overview

Quantity:	100 µL
Target:	GSK3 alpha (GSK3a)
Binding Specificity:	pTyr216, pTyr279
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This GSK3 alpha antibody is un-conjugated
Application:	Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	A synthesized peptide derived from human Phospho-GSK3A/GSK3B (Y216 + Y279)
Clone:	4A5
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	GSK3 alpha (GSK3a)
Alternative Name:	GSK3A (GSK3a Products)

Target Details

Background:	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), 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. Aliases: Glycogen synthase kinase-3 alpha, GSK-3 alpha, Serine/threonine-protein kinase GSK3A, GSK3A
UniProt:	P49840
Pathways:	PI3K-Akt Signaling, WNT Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, cAMP Metabolic Process, Cellular Glucan Metabolic Process, Regulation of Muscle Cell Differentiation, Regulation of G-Protein Coupled Receptor Protein Signaling, ER-Nucleus Signaling, Regulation of Carbohydrate Metabolic Process, BCR Signaling, Warburg Effect

Application Details

Application Notes:	Recommended dilution: IHC:1:50-1:200,
Restrictions:	For Research Use only

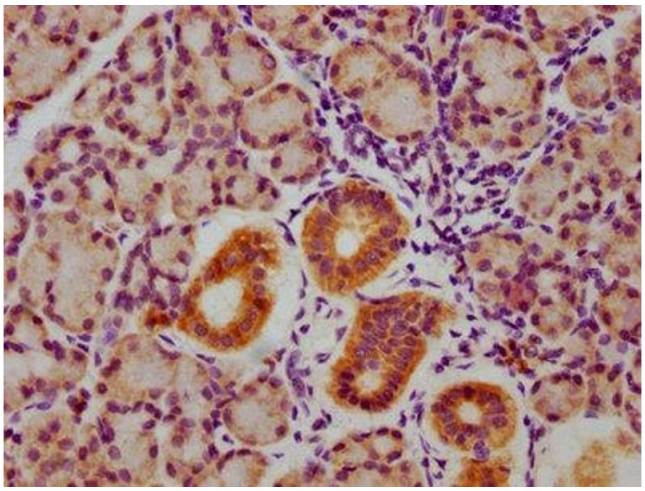
Handling

Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling

Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Immunohistochemistry

Image 1. IHC image of ABIN7127696 diluted at 1:100 and staining in paraffin-embedded human pancreatic tissue performed on a Leica BondTM 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 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.