

Datasheet for ABIN6243413

anti-GSK3 alpha antibody (AA 348-382)[Go to Product page](#)**1** Image**1** Publication

Overview

Quantity:	400 µL
Target:	GSK3 alpha (GSK3a)
Binding Specificity:	AA 348-382
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GSK3 alpha antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This GSK3A antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 348-382 amino acids from the Central region of human GSK3A.
Clone:	RB30809
Isotype:	Ig Fraction
Predicted Reactivity:	H, X
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

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

Target Details

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.
Molecular Weight:	50981
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:	WB: 1:1000
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C

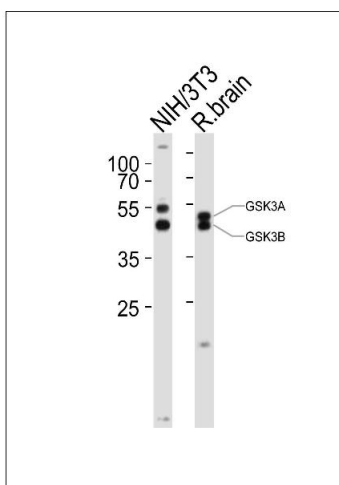
Handling

Expiry Date: 6 months

Publications

Product cited in: Fang, Wang, Miao, Kuang, Ma, Wang, Zhang, Xia: "Involvement of Protein Acyltransferase ZDHHC3 in Maintaining Oocyte Meiotic Arrest in *Xenopus laevis*." in: **Biology of reproduction**, Vol. 95, Issue 3, pp. 67, (2016) ([PubMed](#)).

Images



Western Blotting

Image 1. Western blot analysis of lysates from mouse NIH/3T3 cell line, rat brain tissue lysate (from left to right), using GSK3A Antibody (Center) (ABIN6243413 and ABIN6577862). (ABIN6243413 and ABIN6577862) was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20 µg per lane.