

Datasheet for ABIN6243412
anti-GSK3 alpha antibody (N-Term)

3 Images

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Overview

Quantity:	400 µL
Target:	GSK3 alpha (GSK3a)
Binding Specificity:	AA 76-105, N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GSK3 alpha antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This GSK3A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 76~105 amino acids from the N-terminal region of human GSK3A.
Clone:	RB3817-3818
Isotype:	Ig Fraction
Predicted Reactivity:	M, Rat
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	GSK3 alpha (GSK3a)
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Target Details

Alternative Name:	GSK3 alpha (GSK3A) (GSK3a Products)
Background:	<p>Glycogen synthase kinase 3-alpha (GSK3A) is a multifunctional protein serine kinase implicated in the control of several regulatory proteins including glycogen synthase and transcription factors. It also plays a role in the WNT and PI3K signaling pathways. Under resting conditions GSK3A and its homologs are highly phosphorylated at tyr279 in the phosphorylation loop. Constitutive phosphorylation of this tyrosine is important for kinase activity. Dephosphorylation of tyr279 after mitogen activation is accompanied by kinase inactivation. PKA as well as PI3K-activated PKB inactivate GSK3A by phosphorylation at ser21. Lysophosphatidic acid primarily utilizes a PKC-dependent pathway to modulate GSK3 and certain growth factors (e.g., PDGFB), which control GSK3 mainly through PI3K-PKB, are able to regulate GSK3 through an alternative, redundant PKC pathway. In mice expressing familial AD-associated mutations in APP and PSEN1, lithium reduced the levels of beta-amyloid peptides GSK3A also phosphorylates the tau protein, the principal component of neurofibrillary tangles in AD, and suggested that inhibition of GSK3A may offer a new therapeutic approach to AD.</p>
Molecular Weight:	50981
NCBI Accession:	NP_063937
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. IHC-P: 1:50~100. IHC-P: 1:50~100
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

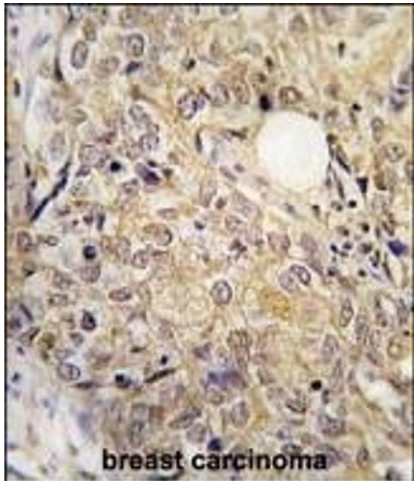
Handling

should be handled by trained staff only.

Storage: 4 °C,-20 °C

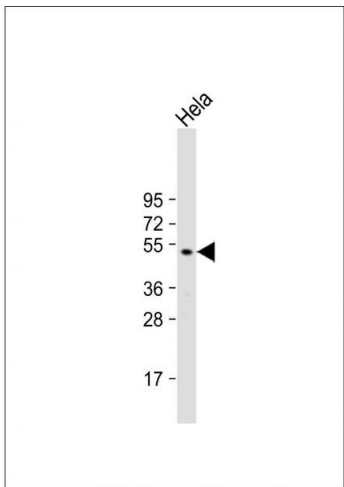
Expiry Date: 6 months

Images



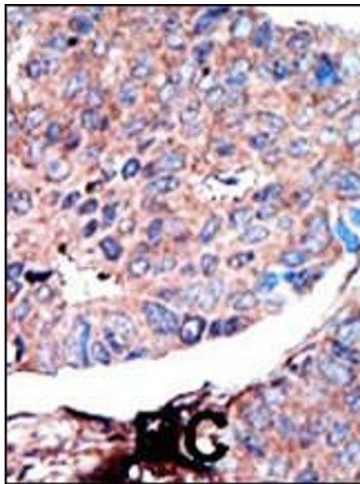
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with GSK3A Antibody (N-term) (ABIN6243412 and ABIN6579034) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated.



Western Blotting

Image 2. Anti-GSK3A Antibody (G83) at 1:1000 dilution + HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 51 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.