

Rabbit GSK3 alpha/beta Polyclonal Antibody | anti-GSK3A antibody

GSK3 alpha/beta Antibody

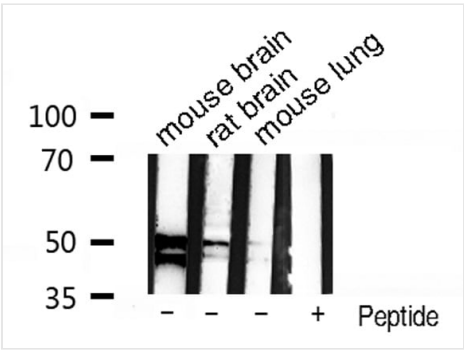
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31094	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

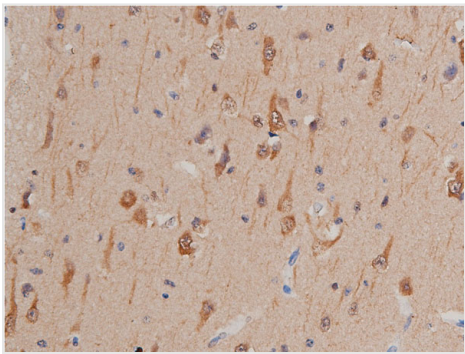
GSK3 alpha/beta; Polyclonal Antibody; GSK3 alpha/beta Antibody; DKFZp686D0638; Glycogen synthase kinase 3 alpha; Glycogen synthase kinase-3 alpha; GSK 3 alpha; GSK 3A; GSK-3 alpha; Gsk3a; GSK3A_HUMAN; GSK3alpha; Serine/threonine protein kinase GSK3A; anti-GSK3A antibody

PRODUCT SPECIFICATIONS

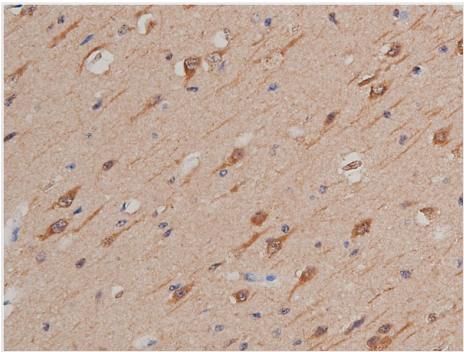
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	GSK3 alpha/beta antibody detects endogenous levels of total GSK3 alpha/beta
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	483
Applicable Applications for anti-GSK3A antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA
Application Notes	WB: 1:500-1:2000 IHC: 1:50-1:200
Immunogen	A synthesized peptide derived from human GSK3 alpha/beta
Subcellular Location	Cytoplasmic and Nuclear
Predicted Cross Reactivity	Pig, Bovine, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



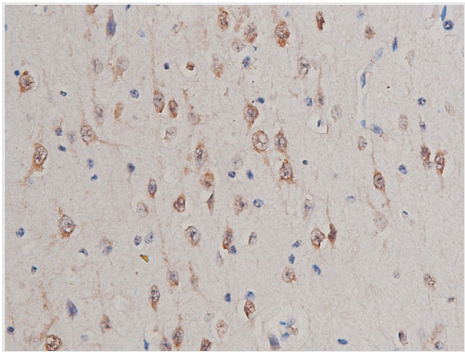
WB (Western Blot)
Western blot analysis of extracts of various celllines, using GSK3 alpha/beta Antibody.



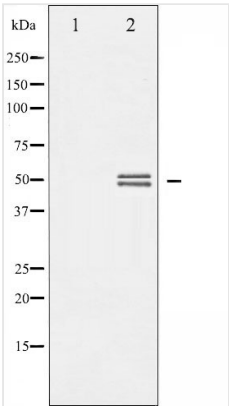
IHC (Immunohistochemistry)
AAA31094 at 1/50 staining human brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



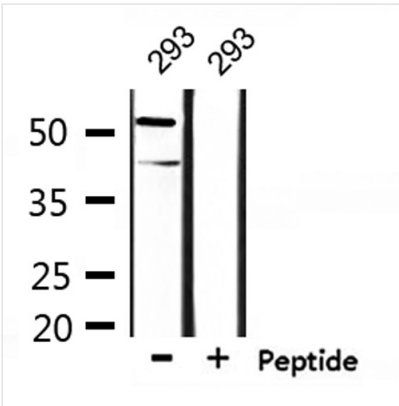
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WB (Western Blot)
Western blot analysis of GSK3 alpha/beta expression in TNF-a treated 293 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



WB (Western Blot)
Western blot analysis of extracts from 293, using GSK3 alpha/beta Antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-GSK3A antibody

Description: GSK3A a proline-directed protein kinase of the GSK family. Implicated in the control of several regulatory proteins including glycogen synthase, Myb, and c-Jun. GSK3 and GSK3 have similar functions. GSK3 phosphorylates tau, the principal component of neurofibrillary tangles in Alzheimer disease and is required for maximal production of amyloid plaque peptides by secretase.

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. Through phosphorylation of the anti-apoptotic protein MCL1, may control cell apoptosis in response to growth factors deprivation.

Subunit Structure: Monomer. Interacts with ARRB2 (By similarity). Interacts with AXIN1 and CTNNB1/beta-catenin. Interacts with CTNND2 (PubMed:19706605).

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.

NCBI AND UNIPROT INFORMATION

NCBI GI #	49574532
NCBI GeneID	2931
NCBI Accession #	NP_063937.2
NCBI GenBank Nucleotide #	NM_019884.2
UniProt Accession #	P49840 ; O14959
Molecular Weight	Observed: 51; 46 kDa Predicted: 51 kDa
NCBI Official Full Name	glycogen synthase kinase-3 alpha
NCBI Official Synonym Full Names	glycogen synthase kinase 3 alpha
NCBI Official Symbol	GSK3A
NCBI Protein Information	glycogen synthase kinase-3 alpha
UniProt Protein Name	Glycogen synthase kinase-3 alpha
UniProt Gene Name	GSK3A
UniProt Synonym Gene Names	GSK-3 alpha

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/gsk3-alpha-beta-antibody-western-blot-immunohistochemistry-elisa/31094>