

Rabbit anti-Human GSK3 alpha (GSK3A) Polyclonal Antibody | anti-GSK3A antibody

GSK3 alpha (GSK3A) Antibody (C-term)

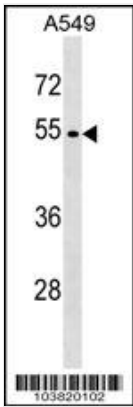
CATALOG # AAA284395	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

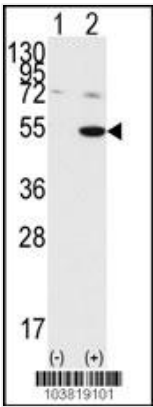
GSK3 alpha (GSK3A); Polyclonal Antibody; GSK3 alpha (GSK3A) Antibody (C-term); Glycogen synthase kinase-3 alpha; GSK-3 alpha; Serine/threonine-protein kinase GSK3A; GSK3A; anti-GSK3A antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This GSK3 alpha (GSK3A) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 448-478 amino acids from the C-terminal region of human GSK3 alpha (GSK3A).
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Positions	448-478
Sequence Length	483
Applicable Applications for anti-GSK3A antibody	ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.



WB (Western Blot)
GSK3A Antibody (C-term) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the GSK3A antibody detected the GSK3A protein (arrow).



WB (Western Blot)
Western blot analysis of GSK3A (arrow) using GSK3A Antibody (C-term). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the GSK3A gene (Lane 2) (Origene Technologies).

ADDITIONAL INFORMATION

Related Product Information for anti-GSK3A antibody	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.1 Under resting conditions GSK3A and its homologs are highly phosphorylated at tyr279 in the phosphorylation loop.2 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 ser21.3 Lysophosphatidic acid primarily utilizes a PKC-dependent pathway to modulate GSK3 and certain growth factors (e.g., PDGFB), which control GSK3 mainly through PIK3-PKB, are able to regulate GSK3 through an alternative, redundant phospholipase-C-gamma-PKC pathway.4 Alzheimer disease (AD) is associated with increased production and aggregation of amyloid-beta-40 and -42 peptides into plaques. GSK3A is required for maximal production of the beta-amyloid-40 and -42 peptides generated from the amyloid precursor protein (APP) by presenilin (PSEN1)-dependent gamma-secretase cleavage.5 In vitro, lithium, a GSK3A inhibitor, blocked the production of the beta-amyloid peptides by interfering with the gamma-secretase step. 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 (MAPT), the principal component of neurofibrillary tangles in AD, and suggested that inhibition of GSK3A may offer a new therapeutic approach to AD.
Product Categories/Family for anti-GSK3A antibody	Cardiovascular; Cell biology; Signal transduction
References	Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).

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	50981
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
UniProt Entry Name	GSK3A_HUMAN

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-gsk3a-antibody-western-blot-elisa/284395>