

# **Product datasheet for AP06151PU-N**

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OriGene Technologies, Inc.

## **GSK3** alpha (**GSK3A**) Rabbit Polyclonal Antibody

**Product data:** 

Product Type: Primary Antibodies

Applications: ELISA, IHC, IP, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

Immunoprecipitation: 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids N-terminus of Human GSK3α.

**Specificity:** This antibody detects endogenous levels of GSK3α protein.

(region surrouding Gly15)

**Formulation:** Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified lg fraction Preservative: 15 mM sodium azide

Concentration: 1.0 mg/ml

**Purification:** Affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-

PAGE)

Conjugation: Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~ 46, 51 kDa

**Gene Name:** glycogen synthase kinase 3 alpha

**Database Link:** Entrez Gene 2931 Human

P49840





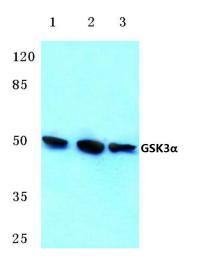
#### Background:

Glycogen synthase kinase 3, or GSK-3, is a serine/threonine, proline-directed kinase involved in a diverse array of signaling pathways, including glycogen synthesis and cellular adhesion, and has been implicated in Alzheimers disease. Two forms of GSK-3, designated GSK-3 $\alpha$  and GSK-3 $\beta$ , have been identified and differ in their subcel lular localization. Tau, a microtubule-binding protein which serves to stabilize microtubules in growing axons, is found to be hyper-phosphorylated in paired helical filaments (PHF), the major fibrous component of neurofibrillary lesions associated with Alzheimer's disease. Hyperphosphorylation of Tau is thought to be the critical event leading to the assembly of PHF. Six Tau protein isoforms have been identified, all of which are phosphorylated by GSK-3. This presents the possibility that miscues in GSK-3 signaling contribute to the onset of Alzheimers disease.

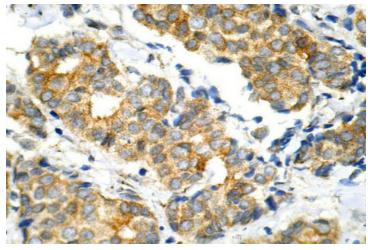
Synonyms:

Glycogen synthase kinase-3 alpha, GSK3A, GSK-3 alpha, Factor A

## **Product images:**



Western blot (WB) analysis of GSK3a antibody at 1/500 dilution Lane 1:Hela cell lysate Lane 2:Raw264.7 cell lysate Lane 3:PC12 cell lysate



Immunohistochemistry (IHC) analyzes of GSK3a antibody in paraffin-embedded human breast carcinoma tissue.