

### Product datasheet for AP20202PU-N

# OriGene Technologies, Inc.

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#### GSK3 alpha (GSK3A) (+ beta) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IHC, WB

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

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

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Specificity:** This antibody antibody detects endogenous levels of GSK3-alpha/beta protein.

**Formulation:** Phosphate buffered saline (PBS), pH~7.2 containing 0.05% Sodium Azide as preservative.

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).

Concentration: 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen.

**Conjugation:** Unconjugated

**Storage:** Store the antibody 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 50686 RatEntrez Gene 606496 MouseEntrez Gene 2931 Human

P49840





#### Background:

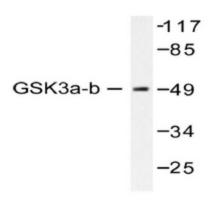
Glycogen synthase kinase 3 alpha belongs to the Ser/Thr family of protein kinases, Cdc2/cdkx subfamily; GSK3 subsubfamily. It is implicated in the hormonal control of several regulatory proteins including glycogen synthase, myb, and the transcription factor c jun. GSK3 phosphorylates glycogen synthase and thereby inactivates it. Insulin stimulates the dephosphorylation of glycogen synthase at the sites phosphorylated by GSK3 and subsequently inhibits GSK3 acutely leading to the stimulation of glycogen synthesis. GSK3 signaling is performed by two isoforms, GSK3 alpha and GSK3 beta. The two isoforms share 97% sequence similarity within their catalytic domains. GSK3 has also been shown to play a role in protein synthesis, cell adhesion, cell proliferation, cell differentiation, microtubule dynamics and cell motility.

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

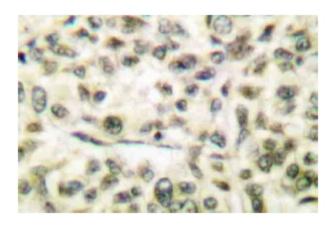
**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Chemokine signaling pathway

## **Product images:**



Western blot (WB) analysis of GSK3a/b antibody (Cat.-No.: AP20202PU-N) in extracts from 293 cells treated with TNF-a 20ng/ml 30mins.



Immunohistochemistry Analysis: AP20202PU-N GSK3a/b antibody staining of Paraffin-Embedded Human breast carcinoma tissue.