

# **Product datasheet for AP02551PU-N**

#### https techs FU: ir

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OriGene Technologies, Inc.

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

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

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

**Immunohistochemistry on Paraffin Sections:** 1/50-1/100.

Immunofluorescence: 1/100-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic non-phosphopeptide derived from human GSK3alpha around the phosphorylation

site of serine 21 (T-S-SP-F-A).

**Specificity:** This Antibody detects endogenous levels of total GSK3α protein.

Formulation: PBS(without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4 containing 150mM NaCl, 0.02% Sodium Azide and 50%

Glycerol

State: Aff - Purified

State: Liquid purified IgG fraction

**Concentration:** lot specific

**Purification:** Affinity chromatography

Conjugation: Unconjugated

Storage: Upon receipt, store undiluted (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: glycogen synthase kinase 3 alpha

**Database Link:** Entrez Gene 2931 Human

P49840



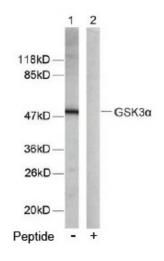
#### Background:

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.

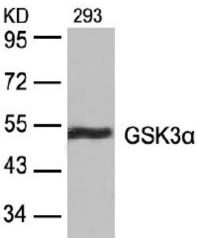
Synonyms:

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

### **Product images:**

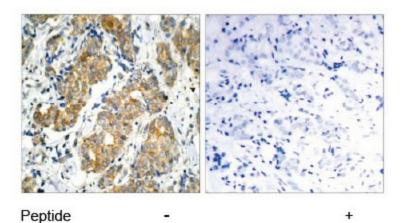


Western Blot analysis of extracts from 293 cells using GSK3alpha antibody

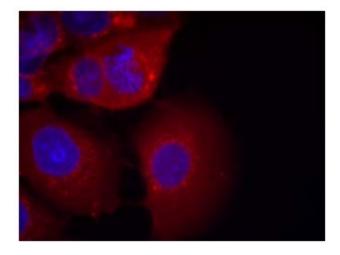


Western blot analysis of extracts from ovary cancer cells using GSK3a antibody





Immunohistochemical analysis of paraffinembedded human breast carcinoma tissue using GSK3a antibody.



Immunofluorescence staining of methanol fixed MCF7 cells using GSK3 alpha antibody