

Product datasheet for **AP20890PU-N**

GSK3 alpha (GSK3A) pSer21 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 detects endogenous levels of p-GSK3alpha protein only when phosphorylated at Ser21.
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 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:	<u>Entrez Gene 50686 Rat</u> <u>Entrez Gene 606496 Mouse</u> <u>Entrez Gene 2931 Human</u> <u>P49840</u>



[View online »](#)

Background:

Glycogen synthase kinase-3 α and β (GSK-3 α , β) are serine/threonine kinases that regulate metabolic enzymes and transcription factors, which are responsible for coordinating processes such as glycogen synthesis and cell adhesion. GSK-3 β activity is also required for nuclear activity of Rel dimers, which mediate an anti-apoptotic response to TNF α in mice. GSK-3 catalytic kinase activity is controlled through differential phosphorylation of serine/threonine residues, which have an inhibitory effect, and tyrosine residues, which have an activating effect. Growth factor stimulation of mammalian cells expressing GSK-3 α and GSK-3 β induces phosphorylation of Ser 21 and Ser 9, respectively through a phosphatidylinositol 3-kinase (PI 3-kinase)-protein kinase B (PKB) dependent pathway, thereby enhancing proliferative signals. Additionally, GSK-3 physically associates with cAMP-dependent protein kinase A (PKA), which phosphorylates Ser 21 of GSK-3 α or Ser 9 of GSK-3 β and inactivates both forms.

Synonyms:

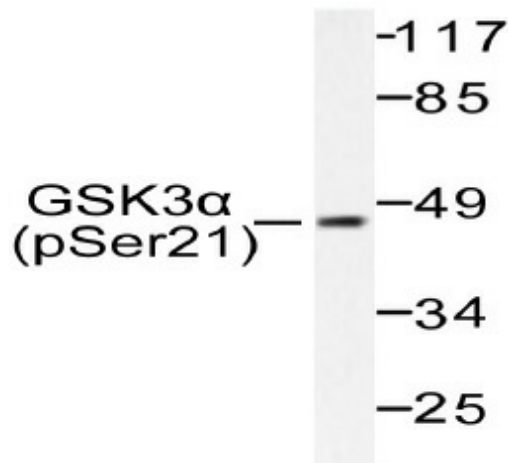
Glycogen synthase kinase-3 alpha, GSK3A, GSK-3 alpha, Factor A

Protein Families:

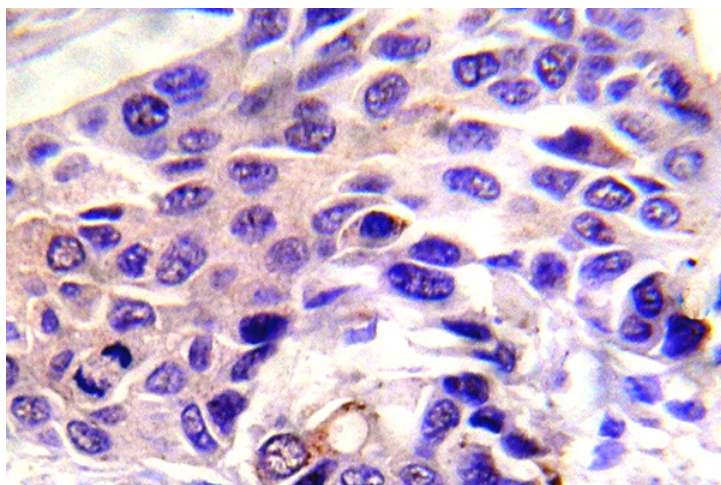
Druggable Genome, Protein Kinase

Protein Pathways:

Chemokine signaling pathway

Product images:

Western blot (WB) analysis of p-GSK3 α antibody (Cat.-No.: AP20890PU-N) in extracts from ovary cancer.



Immunohistochemistry (IHC) analyzes of p-GSK3alpha antibody (Cat.-No. AP20890PU-N) in paraffin-embedded human breast carcinoma tissue.