

# **Product datasheet for TA319263**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **GSK3** beta (GSK3B) Rabbit Polyclonal Antibody

#### **Product data:**

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: ELISA: 1:10,000 - 1:50,000, WB: 1:500 - 1:3,000, IHC: 1:200 - 1:1,000, IF: 1:200 - 1:1,000

Reactivity: Human
Host: Rabbit
Isotype: IgG

Clonality: Polyclonal

**Immunogen:** This affinity purified antibody was prepared from whole rabbit serum produced by repeated

immunizations with a synthetic peptide corresponding to the aa 4-12 of human GSK3 beta.

**Formulation:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Concentration: lot specific

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

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

Database Link: NP 002084

Entrez Gene 2932 Human

P49841

**Synonyms:** glycogen synthase kinase-3 beta; glycogen synthase kinase 3 beta; GSK3beta isoform

**Note:** Glycogen synthase kinase-3 (GSK 3) is a proline-directed serine-threonine kinase that was

initially identified as a phosphorylating and inactivating glycogen synthase. Two isoforms, alpha (GSK 3A) and beta, show a high degree of amino acid homology. GSK 3B is involved in

energy metabolism, neuronal cell development, and body pattern formation. GSK 3B

participates in the Wnt signaling pathway and has been implicated in the hormonal control of several regulatory proteins including glycogen synthase, MYB and the transcription factor JUN. GSK 3B phosphorylates JUN at sites proximal to its DNA-binding domain, thereby

reducing its affinity for DNA.

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

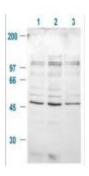




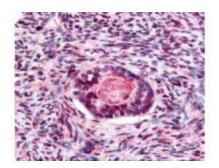
#### **Protein Pathways:**

Alzheimer's disease, Axon guidance, Basal cell carcinoma, B cell receptor signaling pathway, Cell cycle, Chemokine signaling pathway, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Focal adhesion, Hedgehog signaling pathway, Insulin signaling pathway, Melanogenesis, Neurotrophin signaling pathway, Pathways in cancer, Prostate cancer, T cell receptor signaling pathway, Wnt signaling pathway

### **Product images:**



WB using Rabbit-anti-GSK3B pS9 antibody at a 1:1,000 dilution. All lanes contain human 293T whole cell lysate showing a band at 47 kDa. Cells were serum starved for 24 h prior to extraction. Key: Lane 1 Control, Lane 2 treated with IGF-1 (100 ng/ml) for 20', lane 3 pre-treated with 10 uM [LY294002] (selective PI3K inhibitor) and treated with IGF-1 (100 ng/ml) for 20'. Molecular weight markers confirm a MW of ~ 49 kDa. Use a 1:2,000 dilution of HRP Goat-a-Rabbit IgG for detection.



Rabbit anti-GSK3B pS9 was used at a 1:200 dilution to detect GSK3B by immunohistochemistry in human ovarian cancer tumor tissue. Tissue was formalin-fixed and paraffin embedded. Personal Communication, Alan Yen, LifeSpanBiosciences, Seattle, WA.