

# Rabbit anti Glycogen Synthase Kinase 3b (GSK3b) Polyclonal Antibody

Alternative Name(s): Glycogen Synthase Kinase 3b

### **Order Information**

• Description: Glycogen Synthase Kinase 3b (GSK3b)

Catalogue: 500-7614Lot: See labelSize: 100ug/200ulHost: Rabbit

• Host: Rabbit • Clone: nan

• Application: IHC(P), WB • Reactivity: Hu, Ms, Rt, Bv

#### **ANTIGEN PREPARATION**

A synthetic peptide corresponding to the N-terminus of GSK-3 beta protein. This sequence is identical among human, mouse, rat, bovine, dog and chicken species.

### **BACKGROUND**

Glycogen Synthase Kinase- $3\beta$  (GSK- $3\beta$ ) is a serine/threonine kinase that affects glycogen metabolism by phosphorylating and down-regulating the activity of muscle glycogen synthase. Growth factor (such as Insulin) binds to its receptor, recruits PKB/AKT kinase to phosphorylate GSK-3beta on Serine 9, which prevents GSK-3beta from phosphorylating glycogen synthase. In contrast, the phosphorylation of tyrosine 216 in the catalytic domain increase this kinase activity to promote cell death under the absence of growth factors. GSK-3beta is also involved in Wnt signaling pathway where it forms a complex with axin, beta-catenin and adenomatous polyposis coli (APC) protein, thus the GSK-3beta inhibitor is considered as a potential approach in Alzheimer's Disease (AD) treatment.

# **PURIFICATION**

The Rabbit IgG is purified by Epitope Affinity Purification

#### **FORMULATION**

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

#### **SPECIFICITY**

This antbody recognizes Glycogen Synthase Kinase 3b (GSK3b) protein. It reacts to human, mice and rat. The other species not tested.

#### **STORAGE**

The antibodies are stable for 24 months from date of receipt when stored at –20oC to –70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

# **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

Western Blot: 0.1-1 μg/ml
ELISA: 0.01-0.1 μg/ml

Immunoprecipitation: 2-5 μg/ml

• IHC: 2-10 µg/ml

Flow cytometry: Not testedMolecular Weight: 55.0

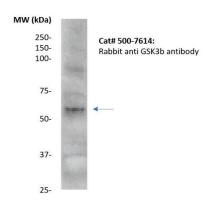
Positive Control: Kidney TissueCellular Location: Cell Membrane

<sup>\*</sup>Optimal dilutions should be determined by researchers for the specific applications.

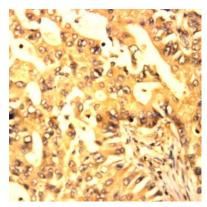




## **DATA ATTACHMENTS**



Western Blot: The mouse muscle tissue lysates were resolved onto 12% SDS-PAGE, transferred to NC membrane, and followed by an immunoblotting with Rabbit anti GSK-3beta (Cat#500-7614)) antibody (Lane 1) at 1:500, or with a pre-incubation of immunizing peptide (lane 2). Observed a major immunoreactive band at molecular weight ~55kDa.



Immunohistochemistry: Human Brreast carcinoma (FFPE) stained with Rabbit anti-GSK3b (Cat# 500-7614) at 1:200 for 10 min @ RT. Staining of formalinfixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

**REFERENCES**