

Rabbit anti GSK-3b (pY216) Polyclonal Antibody

Alternative Name(s): Glycogen Synthase Kinase 3b

Order Information

• Description: GSK-3b (pY216)

Catalogue: 602-190Lot: See labelSize: 100ug/200ulHost: RabbitClone: nan

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

ANTIGEN PREPARATION

A synthetic peptide surrounding to the epitope -NVSYI- with a phosphorylation site at Tyr216 of human GSK3-beta protein. This sequence is identical among human, mouse, rat, bovine, dog and chicken species.

BACKGROUND

Glycogen Synthase Kinase-3 β (GSK-3 β) 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 site-modified Epitope Affinity Purification.

FORMULATION

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

SPECIFICITY

This antibody recognizes GSK-3beta (pY216) with a phosphorylated site at Tyrosine 216. It does not cross-react with non-phosphospecific peptide.

STORAGE

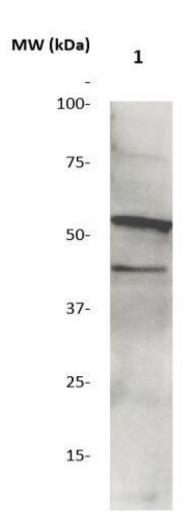
The antibodies are stable for 24 months from date of receipt when stored at –20oC to –70oC. The antibodies can be stored at 20C-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

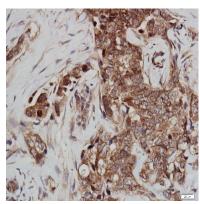
- Western Blot: 0.1-1 μg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: Not tested
- Molecular Weight: 46.0
- Positive Control: Kidney Tissue
- Cellular Location: Cell Membrane

^{*}Optimal dilutions should be determined by researchers for the specific applications.





Western Blot: : The EGF stimulated A431 cell lysates (20 ug/lane) immunoblotted by Rabbit anti GSK-3beta (pY216) (Cat#602-190) antibody at 1:500. Observed a major immunoreactive band at molecular weight ~46kDa.



Immunohistochemistry: Human carcinoma (FFPE) stained with Rabbit anti-TGF (Cat#) at 1:200 for 10 min @ RT. Staining of formalin-fixed 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

FOR RESEARCH USE ONLY.