

Rabbit GSK-3b (pY216) Antibody | anti-GSK-3b (pY216) antibody

Rabbit anti Phospho- GSK-3beta (pTyr 216)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA14095	Rabbit	Human, Rat, Mouse, Bovine, Chicken	ELISA, Western Blot, Immunohistochemistry, Immunoprecipitation

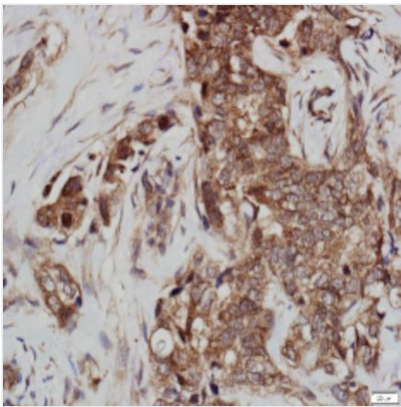
PRODUCT SYNONYMS

GSK-3b (pY216); Rabbit anti Phospho- GSK-3beta (pTyr 216); Rabbit anti-Phospho-GSK3b (pY216); glycogen synthase kinase 3 beta (GSK3-b); anti-GSK-3b (pY216) antibody

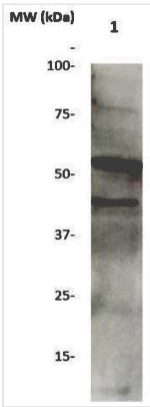
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat, Mouse, Bovine, Chicken
Specificity	This antibody recognizes GSK-3beta (pY216) with a phosphorylated site at Tyrosine 216. It does not crossreact with non-phosphospecific peptide.
Purity/Purification	The Rabbit IgG is purified by site-modified Epitope Affinity Purification.
Form/Format	This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer
Applicable Applications for anti-GSK-3b (pY216) antibody	ELISA, WB (Western Blot), IHC (Immunohistochemistry), IP (Immunoprecipitation)
Application Notes	Western Blot: 0.1-1 ug/ml ELISA: 0.01-0.1 ug/ml Immunoprecipitation: 2-5 ug/ml Optimal dilutions should be determined by researchers for the specific applications.
Antigen Preparation	A synthetic peptide surrounding to the epitope -NVSYL- with a phosphorylation site at Tyr216 of human GSK3-beta protein. This sequence is identical among human, mouse, rat, bovine, dog and chicken species.
Positive Control	Kidney Tissue
Cellular Location	Cell Membrane
Preparation and Storage	The antibodies are stable for 12 months from date of receipt when stored at -20°C to -70°C. The antibodies can be stored at 2-8°C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

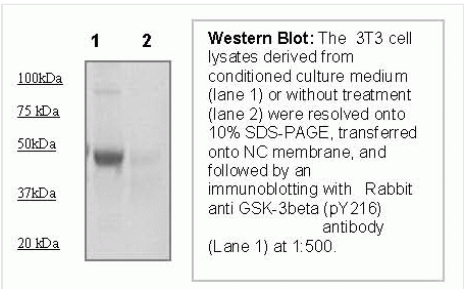
IMAGES



IHC (Immunohistochemistry)
Immunohistochemistry: Human carcinoma (FFPE) stained with Rabbit anti-TGF-β 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.



WB (Western Blot)
Western Blot: : The EGF stimulated A431 cell lysates (20 ug/lane) immunoblotted by Rabbit anti GSK-3β (pY216) (Cat# AAA14095) antibody at 1:500. Observed a major immunoreactive band at molecular weight ~46kDa.



Western Blot: The 3T3 cell lysates derived from conditioned culture medium (lane 1) or without treatment (lane 2) were resolved onto 10% SDS-PAGE, transferred onto NC membrane, and followed by an immunoblotting with Rabbit anti GSK-3β (pY216) antibody (Lane 1) at 1:500.

Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-GSK-3b (pY216) antibody	Glycogen Synthase Kinase-3beta (GSK-3beta) 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.
References	Alan P. Kozikowski, et al. Highly Potent and Specific GSK-3beta Inhibitors That Block Tau Phosphorylation and Decrease alpha-Synuclein Protein Expression in a Cellular Model of Parkinson's Disease. ChemMedChem, 2006, 1 (2), 256-266.

NCBI AND UNIPROT INFORMATION

NCBI GI #	321461564
Molecular Weight	46.0 kDa
NCBI Official Full Name	glycogen synthase kinase 3 beta

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.