

Product datasheet for TA354671

OriGene Technologies, Inc.

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GSK3 beta (GSK3B) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WB

Recommended Dilution: WB 0.1-1 μg/ml ELISA 0.01-0.1 μg/ml IP 2-5 μg/ml IHC 2-10 μg/ml FC 5-10 μg/ml

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: 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.

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

antibody stabilizer.

Purification: The Rabbit IgG is purified by site-modified Epitope Affinity Purification.

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 46 kDa

Gene Name: glycogen synthase kinase 3 beta

Database Link: NP 001139628

Entrez Gene 56637 MouseEntrez Gene 84027 RatEntrez Gene 2932 Human

P49841





Background: Glycogen Synthase Kinase-3β (GSK-3β) 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.

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

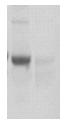
Protein Families: Druggable Genome, Protein Kinase

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: 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-3beta (pY216) antibody (Lane 1) at 1:500.