

## Product datasheet for **TA354454**

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

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Applications:</b>	WB
<b>Recommended Dilution:</b>	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
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Clonality:</b>	Polyclonal
<b>Immunogen:</b>	A synthetic peptide surrounding to the epitope -TTSFA- without phosphorylation of human GSK3-beta protein. This sequence is identical among human, mouse, rat, bovine, dog and chicken species
<b>Formulation:</b>	This affinity purified antibody is supplied in sterile Phosphate buffered saline (pH7.2) containing antibody stabilizer.
<b>Purification:</b>	The Rabbit IgG is purified by Epitope Affinity Purification
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	46 kDa
<b>Gene Name:</b>	glycogen synthase kinase 3 beta
<b>Database Link:</b>	<a href="#">NP_001139628</a> <a href="#">Entrez Gene 56637 MouseEntrez Gene 84027 RatEntrez Gene 2932 Human P49841</a>



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**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.

**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 lysate derived was resolved onto 10% SDS-PAGE, transferred onto NC membrane, and followed by an immunoblotting with Rabbit anti-GSK-3beta (Paired 9) antibody at 1:500.