

## PHOSPHO-GSK3 (TYR216/TYR279) RABBIT MAB

**Cat.#:** N262306

**Product Name:** Anti-Phospho-GSK3 (Tyr216/Tyr279) Rabbit Monoclonal Antibody

**Synonyms:** Serine/threonine-protein kinase GSK3A; Serine/threonine-protein kinase GSK3B

**UNIPROT ID:** P49840/P49841

**Background:** Constitutively active protein kinase that acts as a negative regulator in the hormonal control of glucose homeostasis, Wnt signaling and regulation of transcription factors and microtubules, by phosphorylating and inactivating glycogen synthase (GYS1 or GYS2), CTNNB1/beta-catenin, APC and AXIN1. Requires primed phosphorylation of the majority of its substrates. Contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis. Regulates glycogen metabolism in liver, but not in muscle. May also mediate the development of insulin resistance by regulating activation of transcription factors. In Wnt signaling, regulates the level and transcriptional activity of nuclear CTNNB1/beta-catenin. Facilitates amyloid precursor protein (APP) processing and the generation of APP-derived amyloid plaques found in Alzheimer disease. May be involved in the regulation of replication in pancreatic beta-cells. Is necessary for the establishment of neuronal polarity and axon outgrowth. Through phosphorylation of the anti-apoptotic protein MCL1, may control cell apoptosis in response to growth factors deprivation.

**Immunogen:** A synthetic phosphopeptide corresponding to residues surrounding Tyr216 of human GSK3 alpha

**Applications:** WB,IP

**Recommended Dilutions:** WB: 1/500-1/1000 IP: 1/20

**Host Species:** Rabbit

**Clonality:** Rabbit Monoclonal

**Clone ID:** R01-5G6

**MW:** Calculated MW: 51 kDa; Observed MW: 47-51 kDa

**Isotype:** IgG

**Purification:** Affinity Purified

**Species Reactivity:** Mouse,Rat

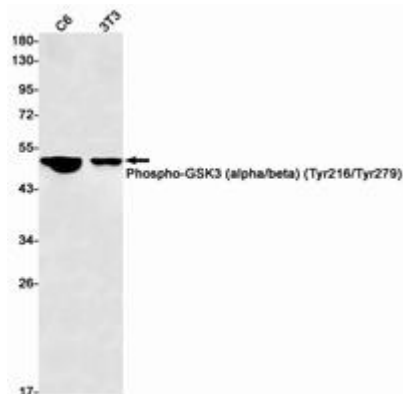
**Conjugation:** Unconjugated

**Modification:** Phosphorylated

**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.3 containing 50% glycerol, 0.5% BSA and 0.02% sodium azide

**Research Areas:** Neuroscience

**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



Western blot analysis of Phospho-GSK3 (alpha/beta) (Tyr216/Tyr279) in C6, 3T3 lysates using Phospho-GSK3 (Tyr216/Tyr279) antibody.