ARG52322
anti-GSK3 beta phospho (Ser9) antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes GSK3 beta phospho (Ser9)
Tested Reactivity	Rat
Predict Reactivity	Hu, Ms, Bov, Chk, Dog, NHuPrm, Xenopus laevis, Zfsh
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	GSK3 beta
Species	Rat
Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser9 conjugated to KLH
Conjugation	Un-conjugated
Alternate Names	EC 2.7.11.26; EC 2.7.11.1; GSK-3 beta; Glycogen synthase kinase-3 beta; Serine/threonine-protein kinase GSK3B

Application Instructions

Application table

Application	Dilution
WB	1:1,000

Application Note: Specific for the ~46k GSK3β protein phosphorylated at Ser9 . Also weakly labels the ~51k GSK3α band due to the high degree of homology between the 2 subunits. Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

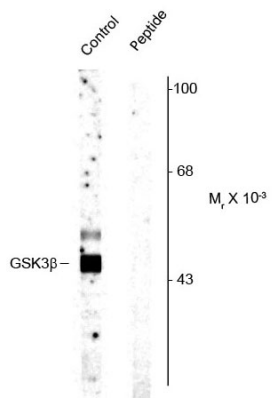
Properties

Form	Liquid
Purification	Affinity Purified
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 0.1 mg/ml BSA and 50% Glycerol
Stabilizer	0.1 mg/ml BSA, 50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 84027 Rat Swiss-port # P18266 Rat
Gene Symbol	GSK3B
Gene Full Name	glycogen synthase kinase 3 beta
Background	Glycogen synthase kinase 3 (GSK3) is a serine/threonine kinase that is involved in the regulation of many signaling pathways. To date, 2 isoforms have been identified: GSK3α and GSK3β. Specifically, GSK3β has been shown to play a key inhibitory role in both the insulin and Wnt signaling pathways (Papkoff and Aikawa 1998). It has been suggested that Ser9 phosphorylation underlies the inhibition of GSK3β by insulin (Sutherland et al., 1993).
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Developmental Biology antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	47 kDa
PTM	Phosphorylated by AKT1 and ILK1. Upon insulin-mediated signaling, the activated PKB/AKT1 protein kinase phosphorylates and desactivates GSK3B, resulting in the dephosphorylation and activation of GYS1. Activated by phosphorylation at Tyr-216 (PubMed:25169422). Inactivated by phosphorylation at Ser-9 (Probable). Mono-ADP-ribosylation by PARP10 negatively regulates kinase activity.

Images



ARG52322 anti-GSK3 beta phospho (Ser9) antibody WB image

Western blot: Rat cortex lysate showing phospho-specific immunolabeling of the ~46k GSK3p protein phosphorylated at Ser 9 stained with ARG52322 anti-GSK3 beta phospho (Ser9) antibody.