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|--------|-----|----|-----|----|---|
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| Quantity: | 0.1 mL | |
|--------------|-----------------------------------------------------------------------------------------------------|--|
| Target: | GSK3 beta (GSK3b) | |
| Reactivity: | Human, Mouse, Rat | |
| Host: | Mouse | |
| Clonality: | Monoclonal | |
| Conjugate: | This GSK3 beta antibody is un-conjugated | |
| Application: | Western Blotting (WB), Immunoprecipitation (IP), Immunofluorescence (IF), Immunocytochemistry (ICC) | |

Product Details

| Immunogen: | A recombinant partial protein was used as the immunogen for this GSK3B antibody. | |
|---------------|----------------------------------------------------------------------------------|--|
| Clone: | 2E6-D6-C12 | |
| Isotype: | lgG2a | |
| Purification: | Protein G affinity | |

Target Details

| Target: | GSK3 beta (GSK3b) |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alternative Name: | GSK3 beta / GSK3B (GSK3b Products) |
| 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), EIF2B, CTNNB1/beta- |

catenin, APC, AXIN1, DPYSL2/CRMP2, JUN, NFATC1/NFATC, MAPT/TAU and MACF1. Requires primed phosphorylation of the majority of its substrates. In skeletal muscle, contributes to insulin regulation of glycogen synthesis by phosphorylating and inhibiting GYS1 activity and hence glycogen synthesis. May also mediate the development of insulin resistance by regulating activation of transcription factors. Regulates protein synthesis by controlling the activity of initiation factor 2B (EIF2BE/EIF2B5) in the same manner as glycogen synthase. In Wnt signaling, GSK3B forms a multimeric complex with APC, AXIN1 and CTNNB1/beta-catenin and phosphorylates the N-terminus of CTNNB1 leading to its degradation mediated by ubiquitin/proteasomes. [UniProt]

UniProt:

P49841

Pathways:

WNT Signaling, Hedgehog Signaling, Fc-epsilon Receptor Signaling Pathway, Cellular Glucan Metabolic Process, ER-Nucleus Signaling, Regulation of Carbohydrate Metabolic Process, Hepatitis C, Autophagy, BCR Signaling, Warburg Effect

Application Details

Application Notes:

The stated application concentrations are suggested starting points. Titration of the GSK3B antibody may be required due to differences in protocols and secondary/substrate sensitivity.\. Western blot: 1:1000,ICC/IF: 1:200,Immunoprecipitation: suitable

Restrictions:

For Research Use only

Handling

Buffer:

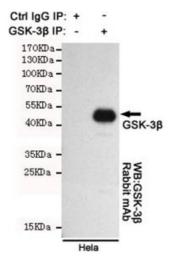
Antibody in PBS with 50 % Glycerol and 0.03 % ProClin 300

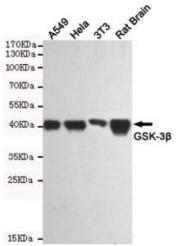
Storage:

-20 °C

Storage Comment:

Store the GSK3B antibody at -20°C.





Western Blotting

Image 1. Immunoprecipitation of GSK3 beta from HeLa cell lysate using the GSK3B antibody. The precipitate was subsequently western blot tested with the same mAb at 1:1000.

Western Blotting

Image 2. Western blot testing of human A549, human HeLa, mouse NIH3T3 and rat brain lysates using GSK3B antibody at 1:1000. Predicted molecular weight ~46 kDa.