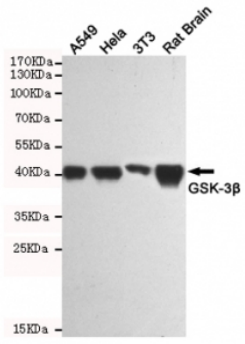
# GSK3B Antibody / GSK3 beta [clone 2E6-D6-C12] (F54007)

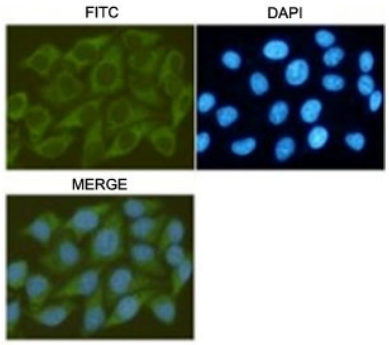
| Catalog No. | Formulation | Size |
|---|---|---|
| F54007-0.1ML | In PBS with 50% glycerol and 0.03% ProClin 300 | 0.1 ml |

**Bulk quote request**

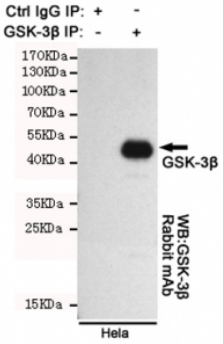
| | |
|---|---|
| **Availability** | 1-3 business days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Purified |
| **Clonality** | Monoclonal (mouse origin) |
| **Isotype** | Mouse IgG2a |
| **Clone Name** | 2E6-D6-C12 |
| **Purity** | Protein G affinity |
| **UniProt** | P49841 |
| **Applications** | Western blot : 1:1000<br>ICC/IF : 1:200<br>Immunoprecipitation : suitable |
| **Limitations** | This GSK3B antibody is available for research use only. |




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.




ICC/IF staining of HeLa cells (fixed with -20oC Methanol) with GSK3B antibody 1:200.




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.

## Description

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]

## 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.

## Immunogen

A recombinant partial protein was used as the immunogen for this GSK3B antibody.

## Storage

Store the GSK3B antibody at -20oC.

Ordering:Phone:858.663.9055 | Fax:1.267.821.0800 | Email:info@nsjbio.com
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