

Monoclonal Antibody to GSK3 alpha

Cat. #: Mab-607074

Description:

Glycogen synthase kinase 3 alpha belongs to the Ser/Thr family of protein kinases, Cdc2/cdkx subfamily; GSK3 subsubfamily. It is implicated in the hormonal control of several regulatory proteins including glycogen synthase, myb, and the transcription factor c jun. GSK3 phosphorylates glycogen synthase and thereby inactivates it. Insulin stimulates the dephosphorylation of glycogen synthase at the sites phosphorylated by GSK3 and subsequently inhibits GSK3 acutely leading to the stimulation of glycogen synthesis. GSK3 signaling is performed by two isoforms, GSK3 alpha and GSK3 beta. The two isoforms share 97% sequence similarity within their catalytic domains. GSK3 has also been shown to play a role in protein synthesis, cell adhesion, cell proliferation, cell differentiation, microtubule dynamics and cell motility.

Immunogen/Specificity:

Ni-NTA purified truncated recombinant GSK3 alpha expressed in E. Coli strain BL21 (DE3)

Applications :

Western Blot: 1: 500- 1: 2,000

IF:1: 200- 1: 1,000

ELISA: Propose dilution 1: 10,000.

Determining optimal working dilutions by titration test.

Formulation

Crude ascites.

Reference:

1. Mendez P, Garcia-Segura LM. *Endocrinology*. 2006 Jun;147(6):3027-39. Epub 2006 Feb 23.
2. Bianchi M, De Lucchini S, et, al. *Biochem J*. 2005 Oct 15;391(Pt 2):359-70.
3. De Servi B, Hermani A, Medunjanin S, Mayer D. *Oncogene*. 2005 Jul 21;24(31):4946-55.

Clone Number: IgG1

Isotype: IgG1

Species: Human

Storage and Stability: stored at -20 C

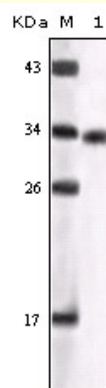


Figure 1: Western blot analysis using GSK3 α monoclonal antibody against truncated GSK3 α recombinant protein

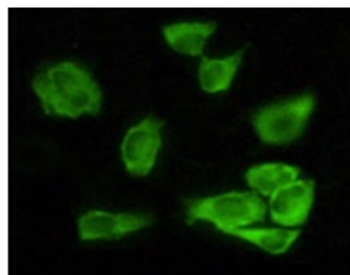


Figure 2: Immunofluorescence analysis of HeLa cells using GSK3 α antibody showing cytoplasmic localization