

GSK-3 β (m): 293T Lysate: sc-120654

BACKGROUND

Glycogen synthase kinase-3, or GSK-3, is a serine/threonine, proline-directed kinase involved in a diverse array of signaling pathways, including glycogen synthesis and cellular adhesion, and has been implicated in Alzheimer's disease. Two forms of GSK-3, designated GSK-3 α and GSK-3 β , have been identified and differ in their subcellular localization. Tau, a microtubule-binding protein which serves to stabilize microtubules in growing axons, is found to be hyperphosphorylated in paired helical filaments (PHF), the major fibrous component of neurofibrillary lesions associated with Alzheimer's disease. Hyperphosphorylation of Tau is thought to be the critical event leading to the assembly of PHF. Six Tau protein isoforms have been identified, all of which are phosphorylated by GSK-3. This presents the possibility that miscues in GSK-3 signaling contribute to the onset of Alzheimer's disease.

REFERENCES

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: Gsk3b (mouse) mapping to 16 B4.

PRODUCT

GSK-3 β (m): 293T Lysate represents a lysate of mouse GSK-3 β transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

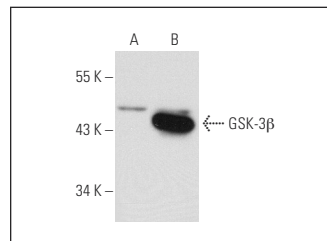
APPLICATIONS

GSK-3 β (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GSK-3 β antibodies. Recommended use: 10-20 μ l per lane.

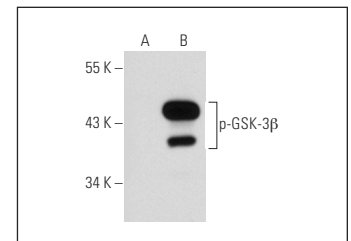
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GSK-3 β (1F7): sc-53931 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse GSK-3 β expression in GSK-3 β transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



GSK-3 β (1F7): sc-53931. Western blot analysis of GSK-3 β expression in non-transfected: sc-117752 (A) and mouse GSK-3 β transfected: sc-120654 (B) 293T whole cell lysates.



p-GSK-3 β (3A8): sc-81495. Western blot analysis of GSK-3 β phosphorylation in non-transfected: sc-117752 (A) and mouse GSK-3 β transfected: sc-120654 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.