

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GSK-3 α . In direct ELISAs, this antibody does not detect recombinant human GSK-3 β .
Source	Monoclonal Mouse IgG _{2B} Clone # 288901
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GSK-3 α Gly90-Ser483 Accession # P49840.2
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

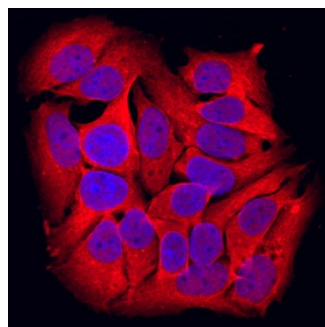
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 μ g/mL	See Below

DATA

Immunocytochemistry



GSK-3 α in MCF-7 Human Cell Line.
GSK-3 α was detected in immersion fixed MCF-7 human breast cancer cell line using Mouse Anti-Human GSK-3 α Monoclonal Antibody (Catalog # MAB2986) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Glycogen Synthase Kinase-3 (GSK-3) is a serine/threonine kinase initially identified as an inhibitor of glycogen synthase. Two isoforms (GSK-3 α and GSK-3 β) share 85% amino acid identity. GSK-3 α is inhibited by phosphorylation at S21 by Akt and other kinases. Deregulated GSK-3 has been implicated in several diseases including type II diabetes, Alzheimer's disease, bipolar disorder, and cancer.