

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850 UNITED STATES Phone: +1-888-267-4436 Fax: +1-301-340-8606 techsupport@origene.com

## OriGene Technologies GmbH

Schillerstr. 5 32052 Herford GERMANY Phone: +49-5221-34606-0 Fax: +49-5221-34606-11 info-de@origene.com

## AM26738PU-N Monoclonal Antibody to Glycogen Synthase Kinase-3 (GSK3)

(phospho specific) - Purified

Quantity: 0.1 mg

Background: GSK-3 has been highly conserved during evolution, and homolog genes have been

identified in virtually every eukaryotic genome investigated. In mam mals, GSK-3 is encoded by two genes known as gsk-3  $\alpha$  and gsk-3 $\beta$  encoding GSK-3 $\alpha$  (483 aa in humans) and GSK-3 $\beta$  (433 aa) proteins with apparent molecular masses of 51 and 47kDa, respectively. Both isoforms are almost identical (98%) within their ATP

binding p ocket but differ in their N- and C- terminal sequences.

Host / Isotype: Mouse / IgG1

**Recommended Isotype** 

**Controls:** 

SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N

Clone: 7G-1F2

Immunogen: Synthetic peptide conjugate corresponding to Drosophila

AA Sequence:

(C) 203 KQLLHGEPNVS phospho YICSR 219 Y

Format: State: Lyophilized affinity purified Ig fraction

**Buffer System:** Phosphate buffered saline pH 7.2 (PBS)

Preservatives: 0.01% Kathon

**Stabilizers:** 5 mg/ml bovine serum albumin (BSA)

**Reconstitution:** Reconstitute by adding 0.5 ml distilled water. This stock solution

contains 0.2 mg/ml lgG.

Applications: Immunohistochemistry on paraffin sections: 1 µg/ml (1:200). Microwave pretreatment

in citrate buffer is recommended for antigen retrieval.

Suggested positive control: Human brain.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

**Specificity:** This antibody recognizes GSK-3 in most species.

The antibody was generated against the phosphorylated catalytic domain (between sub-domain VII and VIII) of the Drosophila GSK-3 / shaggy enzyme, corntaining the phospho-Tyrosine 279 of h uman GSK-3α and phospho-Tyrosine 216 of human GSK-3β, respectively. This antibody does not react with GSK-3 or shaggy expressed in E. coli, but will react with the corresponding natural enzyme or the one expressed in Sf9 cells. The observed preference for the phosphorylated form is about 50:1.

The antigen has been described in the testis, thymus, prostate and ovary, weak in the

brain, lung and kidney.

Species Reactivity: Tested: Human, Rat, Porcine

## AM26738PU-N: Monoclonal Antibody to Glycogen Synthase Kinase-3 (GSK3)



(phospho specific) - Purified

Storage: Store lyophilized at 2-8°C for 6 month or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Harwood AJ, Plyte SE, Woodgett J, Strutt H, Kay RR. Glycogen synthase kinase 3

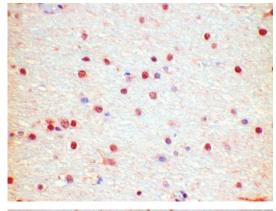
regulates cell fate in Dictyostelium. Cell. 1995 Jan 13;80(1):139-48. PubMed PMID:

7813009.

Pictures: Immunohistochemistry on paraffin

sections: Human cortex, stained

with AM26738PU-N.



Immunohistochemistry on paraffin sections: Swine brain cortex, stained with AM26738PU-N.

