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Datasheet for 600-401-444

# GSK3 Alpha Antibody

## Overview

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| **Description:** | Anti-GSK3 alpha (RABBIT) Antibody - 600-401-444 |
| **Item No.:** | 600-401-444 |
| **Size:** | 100 µg |
| **Applications:** | ELISA, WB |
| **Reactivity:** | Human |
| **Host Species:** | Rabbit |

## Product Details

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| **Background:** | Glycogen synthase kinase 3 alpha (GSK3A) belongs to the ser/thr family of protein kinases, Cdc2/cdkx subfamily; gsk-3 subsubfamily. It is implicated in the hormonal control of several regulatory proteins including glycogen synthase, myb, and the transcription factor c-jun. GSK3A is a proline-directed serine-threonine kinase that was initially identified as a phosphorylating and inactivating glycogen synthase. Two isoforms, alpha (GSK3A) and beta (GSK3B), show a high degree of amino acid homology. GSK3B is involved in energy metabolism, neuronal cell development, and body pattern formation. |
| **Synonyms:** | rabbit anti-GSK3 alpha antibody, rabbit anti-GSK3α antibody, GSK 3 alpha antibody, Glycogen synthase kinase-3 alpha antibody, GSK-3 alpha antibody, GSK 3A antibody, GSK-3A antibody, GSK3alpha antibody, Serine/threonine-protein kinase GSK3A |
| **Host Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **Format:** | IgG |

## Target Details

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| **Gene Name:** | GSK3A |
| **Reactivity:** | Human |
| **Immunogen Type:** | Conjugated Peptide |

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| **Immunogen:** | This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the N-Terminal region near aa 1-25 of human GSK3 alpha. |
| **Purity/Specificity:** | This affinity-purified antibody is directed against human GSK3A. The product was affinity purified from monospecific antiserum by immunoaffinity purification. This antibody will react with both the phosphorylated and non-phosphorylated form of the protein at the S21residue. A BLAST analysis was used to suggest reactivity with this protein from human, chimpanzee and rat based on 100% homology for the immunogen sequence. Cross reactivity with GSK3A homologues from other sources has not been determined. No cross reactivity is expected against GSK3B. |
| **Relevant Links:** | • NCBI - 49574532<br>• UniProtKB - P49840<br>• GeneID - 2931 |

## Application Details

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| **Tested Applications:** | ELISA, WB |
| **Application Note:** | This affinity-purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 52 kDa in size corresponding to GSK3A by western blotting in the appropriate cell lysate or extract. |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:4,000 - 1:20,000 |
| **IF:** | User Optimized |
| **WB:** | 1:500 - 1:2,000 |

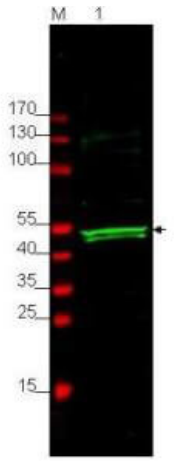
## Formulation

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| **Physical State:** | Liquid (sterile filtered) |
| **Concentration:** | 1.0 mg/mL by UV absorbance at 280 nm |
| **Buffer:** | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.01% (w/v) Sodium Azide |
| **Stabilizer:** | None |

## Shipping & Handling

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| **Shipping Condition:** | Dry Ice |
| **Storage Condition:** | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

## Images




**Western Blot**
Western blot using Rockland's Affinity Purified anti-GSK3A antibody shows detection of a 52 kDa band corresponding to human GSK3A present in ~ 35 µg of HEK293 whole cell lysate (p/n W09-000-365). A 4-20% Tris Glycine gel was used for separation followed by blocking with 5% BLOTTO (p/n B501-0500) in PBS. Primary antibody was used at a 1:1,000 dilution in blocking buffer and reacted overnight at 4°C. The membrane was washed and reacted with a 1:10,000 dilution of IRDye800™ conjugated Gt-a-Rabbit IgG [H&L] MX (p/n 611-132-122) for 45 min at room temperature (800 nm channel, green). Molecular weight estimation was made by comparison to prestained MW markers in lane M (700 nm channel, red). IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

## Disclaimer

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