


Product datasheet

Anti-GSK3 (alpha + beta) antibody [EP933Y] ab62368

Recombinant RabMAb

[6 References](#) [2 Images](#)

Overview

Product name	Anti-GSK3 (alpha + beta) antibody [EP933Y]
Description	Rabbit monoclonal [EP933Y] to GSK3 (alpha + beta)
Host species	Rabbit
Specificity	ab62368 detects both GSK3 alpha and GSK3 beta.
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide within Human GSK3 (alpha + beta). The exact sequence is proprietary.
Positive control	293T cell lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.31% Sodium citrate, 0.175% Sodium chloride, 0.0172% EDTA disodium salt, 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EP933Y
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab62368 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		

Application notes

WB: 1/1000 - 1/2000. Detects a band of approximately 47 kDa (predicted molecular weight: 51 kDa (alpha isoform) / 47 kDa (beta isoform).

Is unsuitable for Flow Cyt, ICC, IHC-P or IP.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

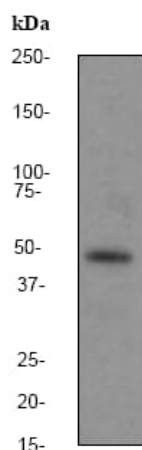
Target

Relevance

Glycogen synthase kinase 3 (GSK3) is a proline directed serine threonine kinase that was initially identified as a phosphorylating and inactivating glycogen synthase, a key enzyme in glycogen metabolism. Since then, it has been shown to be involved in the regulation of a diverse array of cellular functions, including protein synthesis, cell proliferation, cell differentiation, microtubule assembly/disassembly, and apoptosis. GSK3s substrate specificity is unique in that phosphorylation of substrate only occurs if a phosphoserine or phosphotyrosine is present four residues C terminal to the site of GSK phosphorylation. There exists two isoforms of GSK3, alpha and beta, and they show a high degree of amino acid homology. The two isoforms of GSK3 are strictly regulated via phosphorylation. Phosphorylation of GSK3 beta on Ser9 (Ser21 in GSK3 alpha) by protein kinase B (PKB) causes its inactivation is the primary mechanism responsible for growth factor inhibition of this kinase. Activation of GSK3 beta is dependent upon the phosphorylation of Tyr216 (Tyr279 in GSK3 alpha). Upon activation, it has been shown to phosphorylate a number of different cellular proteins, including p53, c-Myc, c-Jun, heat shock factor 1 (HSF1), and cyclin D1. GSK3 beta also has been shown to phosphorylate aberrant sites on the microtubule associated protein tau, which is critical for the progression of Alzheimer's disease. GSK3B is involved in energy metabolism, neuronal cell development, and body pattern formation.

Cellular localization Cytoplasmic and Nuclear

Images



Western blot - Anti-GSK3 (alpha + beta) antibody [EP933Y] (ab62368)

Anti-GSK3 (alpha + beta) antibody [EP933Y] (ab62368) at 1/2000 dilution + 293T cell lysate at 10 µg

Secondary

goat anti-rabbit, HRP labeled, at 1/2000 dilution

Predicted band size: 51,47 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-GSK3 (alpha + beta) antibody [EP933Y] (ab62368)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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