abcam

Product datasheet

Anti-GSK3 (alpha + beta) (phospho Y216 + Y279) antibody ab4797

★★★★★ 4 Abreviews 9 References 画像数 1

製品の概要

製品名 Anti-GSK3 (alpha + beta) (phospho Y216 + Y279) antibody

製品の詳細 Rabbit polyclonal to GSK3 (alpha + beta) (phospho Y216 + Y279)

由来種 Rabbit

 アプリケーション
 適用あり: WB

 種交差性
 交差種: Mouse

免疫原 Synthetic peptide corresponding to GSK3 (alpha + beta) (phospho Y216 + Y279). The sequence

is conserved in rat and zebrafish GSK-3a and mouse, rat, frog and zebrafish GSK-3b.

特記事項

Glycogen synthase kinase-3 (GSK 3) is a proline-directed serine-threonine kinase that was initially identified as a phosphorylating and inactivating glycogen synthase. Two isoforms, alpha (GSK 3A) and beta, show a high degree of amino acid homology. GSK 3B is involved in energy

metabolism, neuronal cell development, and body pattern formation.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw

cycles.

バッファー pH: 7.3

Constituent: PBS

精製度 Immunogen affinity purified

特記事項(精製) Purified from rabbit serum by epitope specific affinity chromatography. Any reactivity towards the

1

non-tyrosine phosphorylated GSK 3 alpha + beta protein has been eliminated through a series of

preabsorption steps.

一次抗体 備考 Glycogen synthase kinase-3 (GSK 3) is a proline-directed serine-threonine kinase that was

> initially identified as a phosphorylating and inactivating glycogen synthase. Two isoforms, alpha (GSK 3A) and beta, show a high degree of amino acid homology. GSK 3B is involved in energy

metabolism, neuronal cell development, and body pattern formation.

ポリモノ ポリクローナル

アイソタイプ lqG

アプリケーション

Abpromise保証は、次のテスト済みアプリケーションにおけるab4797の使用に適用されます The Abpromise guarantee アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★☆ (4)	Use a concentration of 0.5 - 1 μ g/ml. Predicted molecular weight: 51,47 kDa. Use at a concentration of 0.5 - 1.0 μ g/ml. Predicted molecular weight: 51kDa for GSK 3 alpha and 47 kDa for GSK 3 beta.

ターゲット情報

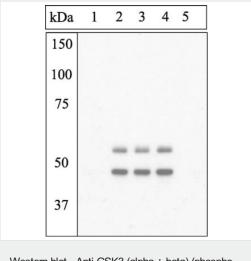
関連性

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.

細胞内局在

Cytoplasmic and Nuclear

画像



Western blot - Anti-GSK3 (alpha + beta) (phospho Y216 + Y279) antibody (ab4797) Extracts of 3T3L1 cells stimulated with 100 nM insulin for 10 minutes were resolved by SDS-PAGE on a 10% Tris-glycine gel and transferred to PVDF. The membrane was blocked with a 5% BSA-TBST buffer for one hour at room temperature and either left untreated (1-4) or treated with lambda (λ) phosphatase (5), then incubated with the GSK-3 α [pY279] / β [pY216] antibody for two hours at room temperature in a 1% BSATBST buffer, following its prior incubation with: the phosphopeptide immunogen (1), no peptide (2), the non-hosphopeptide corresponding to the phosphopeptide immunogen (3), or a generic phosphotyrosinecontaining peptide (4). After washing, the membrane was incubated with goat F(ab') 2 anti-rabbit lgG HRP conjugate, and signals were detected. The data show that only the phosphopeptide corresponding to GSK-3α [pY279] /β[pY216] blocks the antibody signal, demonstrating the specificity of the antibody. The data also show that phosphatase stripping eliminates the signal, further verifying that the antibody is phospho-specific.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors