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Datasheet for 600-401-E41

TAO2 phospho S181 Antibody

Overview

Description:	Anti-TAO2 pS181 (RABBIT) Antibody - 600-401-E41
Item No.:	600-401-E41
Size:	100 µL
Applications:	WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	TAO2pS181 Antibody detects TAO2. In vitro, TAO (thousand and one amino acid) protein kinase 2 (TAO2) activates MAP/ERK kinases (MEKs) 3, 4, and 6 toward their substrates p38 MAP kinase JNK/SAPK. This and more recent work has led to the proposal that the TAO protein kinases play an essential role in signaling from physiological agonists to the stress-responsive p38 MAPKs. Autophosphorylation of TAO2 may play a role in the mechanism of TAO2 activation. The MEK binding domain of TA2O is autophosphorylated on both serine and threonine residues and Ser181 is located within this domain. Anti-TAO2 pS181 Antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.
Synonyms:	Serine/threonine-protein kinase TAO2, Kinase from chicken homolog C, hKFC-C, Prostate-derived sterile 20-like kinase 1, PSK-1, Thousand and one amino acid protein kinase 2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TAOK2
Reactivity:	Human, Mouse, Rat
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-TAO2 pS181 Antibody was produced in rabbit by repeated immunizations with synthetic phospho-peptide corresponding to amino acid residues surrounding Ser181 of TAO2 protein.
Purity/Specificity:	Anti-TAO2 pS181 Antibody is directed against human TAO2 protein phosphorylated at Ser181. TAO2 pS181 antibodies are prepared from monospecific antiserum by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum. Immunolabeling is completely eliminated by treatment with lambda-phosphatase. Reactivity is expected from the following species based on 100% sequence homology: zebra fish, xenopus, finch and canine.
Relevant Links:	• UniProtKB - Q9UL54 • GeneID - 9344 • UniProtKB - Q9UL54.2

Application Details

Tested Applications:	WB
Application Note:	Anti-TAO2 pS181 (Rabbit) antibody is tested for use in Western Blotting. Expect a band of approximately 120 kDa in size corresponding to TAO2 protein phosphorylated at Ser181 in the appropriate cell lysate or extract. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	1:1000

Formulation

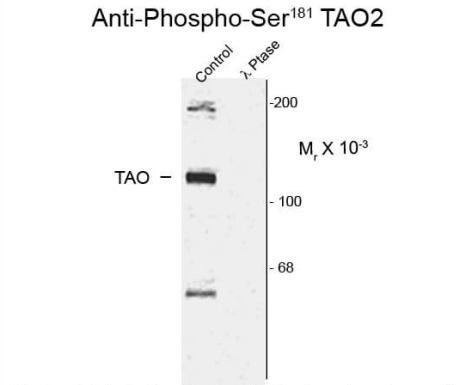
Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western blot of rat cortex lysate showing phosphospecific immunolabeling of the ~120k TAO2 protein phosphorylated at Ser181.

Western Blot

Western Blot of Rabbit anti-TAO2 pS181 antibody. Lane 1: rat cortex lysate (control). Lane 2: λ-Ptase. Load: 10 µg per lane. Primary antibody: TAO2 pS181 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 120 kDa for TAO2 pS181. Other band(s): TAO2 pS181 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.