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Datasheet for 600-401-469

Tlk1 Antibody

Overview

Description:	Anti-TLK1 (RABBIT) Antibody - 600-401-469
Item No.:	600-401-469
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Tlk-1 (also known as tousled-like kinase, serine/threonine-protein kinase tousled-like 1 and PKU-beta) is a target for Chk1 upon induction of DNA-damage. Tousled-like kinases, first described in Arabadopsis, are nuclear serine/threonine kinases that are potentially involved in the regulation of chromatin assembly. Tlk-1 is rapidly and transiently inhibited by phosphorylation following the generation of DNA double-stranded breaks during S-phase. This is cell cycle checkpoint and ATM-pathway dependent. Tlk-1 heterodimerizes with Tlk-2. Multiple isoforms of the protein have been detected. Mature Tlk-1 is reported to have an apparent molecular weight of ~86kDa, ~89kDa and ~64kDa corresponding to isoforms 1, 2 and 3 respectively.
Synonyms:	rabbit anti-TLK1 antibody, TLK-1, TLK 1, PKU-beta antibody, serine threonine protein kinase antibody, Serine/threonine protein kinase tousled like 1 antibody, Tousled like kinase 1 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TLK1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to a C-Terminal region near amino acids 730-755 of human Tlk1 (Tousled-like kinase) (isoform 1) protein.
Purity/Specificity:	This affinity purified antibody is directed against human Tlk-1 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. This antibody reacts with both phosphorylated and non-phosphorylated forms of Tlk-1 at the S743 residue (isoform 1) of the protein. The antibody will react with all isoforms of Tlk-1. A BLAST analysis was used to suggest reactivity with this protein from human, chimpanzee, orangutan, and dog sources based on 100% homology for the immunogen sequence. Cross reactivity with Tlk-1 protein from mouse, rat and chicken may occur as this sequence only varies by one amino acid residue (93% homology). Cross reactivity with Tlk-1 homologues from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9UKI8 • NCBI - 33636698 • GeneID - 9874

Application Details

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 86 kDa, 89 kDa or 64 kDa in size corresponding to isoforms of TLk-1 by western blotting in the appropriate cell lysate or extract. This antibody reacts with both phosphorylated and non-phosphorylated forms of Tlk-1 at the S743 residue (isoform 1) of the protein.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
WB:	1:200 - 1:2,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.60 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

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-Tlk-1 antibody shows detection of a band ~64 kDa corresponding to isoform 3 of human Tlk-1. Specific reactivity with this band is blocked when the antibody is pre-incubated with the immunizing peptide (data not shown). Approximately 30 ug of a HeLa nuclear extract (p/n W09-001-367) was separated by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:250 for 2h at room temperature followed by washes and reaction with a 1:10,000 dilution of IRDye 800 conjugated Gt-a-Rabbit IgG [H&L] MX (p/n 611-132-122) for 45 min at room temperature. 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

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.