

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:	<ul style="list-style-type: none">• UniProtKB - Q9UKI8• NCBI - 33636698• GenelD - 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

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