

# TLK1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8101b

## **Product Information**

Application	WB, IHC-P, E
Primary Accession	<u>Q9UKI8</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	86700
Antigen Region	720-750

## **Additional Information**

Gene ID	9874
Other Names	Serine/threonine-protein kinase tousled-like 1, PKU-beta, Tousled-like kinase 1, TLK1, KIAA0137
Target/Specificity	This TLK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 720-750 amino acids from the C-terminal region of human TLK1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TLK1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name	TLK1
Synonyms	KIAA0137
Function	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 and appears to regulate processes

	involved in chromatin assembly. Isoform 3 phosphorylates and enhances the stability of the t-SNARE SNAP23, augmenting its assembly with syntaxin. Isoform 3 protects the cells from the ionizing radiation by facilitating the repair of DSBs. In vitro, phosphorylates histone H3 at 'Ser-10'.
Cellular Location	Nucleus
Tissue Location	Widely expressed. Present in fetal placenta, liver, kidney and pancreas but not heart or skeletal muscle. Also found in adult cell lines. Isoform 3 is ubiquitously expressed in all tissues examined.

#### Background

The Tousled-like kinases, first described in Arabadopsis, are nuclear serine/threonine kinases that are potentially involved in the regulation of chromatin assembly.[supplied by OMIM]

#### References

Krause, D.R., et al., Oncogene 22(38):5927-5937 (2003). Cabaniols, J.P., et al., Mol. Biol. Cell 10(12):4033-4041 (1999). Sillje, H.H., et al., EMBO J. 18(20):5691-5702 (1999). Yamakawa, A., et al., Gene 202 (1-2), 193-201 (1997).

#### Images



All lanes : Anti-TLK1 Antibody (L687) at 1:8000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 87 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of hTLK1-L687 (Cat. #AP8101b) in K562 cell line lysates (35ug/lane). TLK1 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



## Citations

• <u>Silencing of Tousled-like kinase 1 sensitizes cholangiocarcinoma cells to cisplatin-induced apoptosis.</u>

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.