10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

TLK1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8101b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UKI8
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
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.

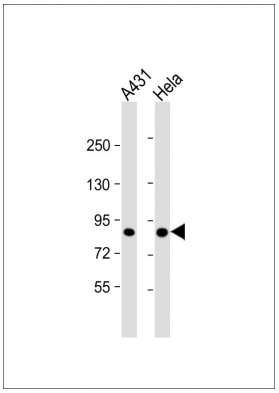
Background

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]

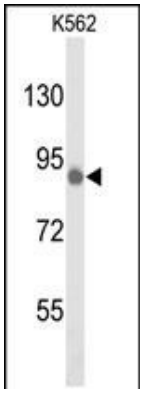
References

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

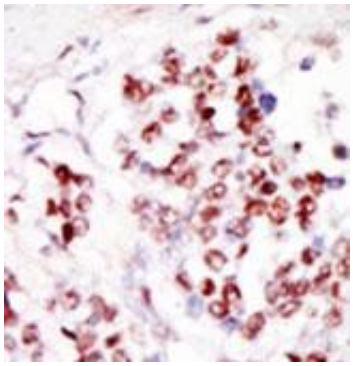


All lanes : Anti-TLK1 Antibody (L687) at 1:8000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 87 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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

- Silencing of Tousled-like kinase 1 sensitizes cholangiocarcinoma cells to cisplatin-induced apoptosis.

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