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Anti-TLK1 Antibody

Catalog # AP51854

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q9UKI8
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	86700

Additional Information

Gene ID	9874
Other Names	KIAA0137; Serine/threonine-protein kinase tousled-like 1; PKU-beta; Tousled-like kinase 1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TLK1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

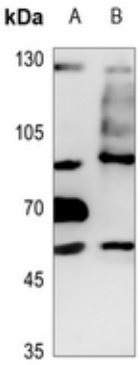
Protein Information

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.

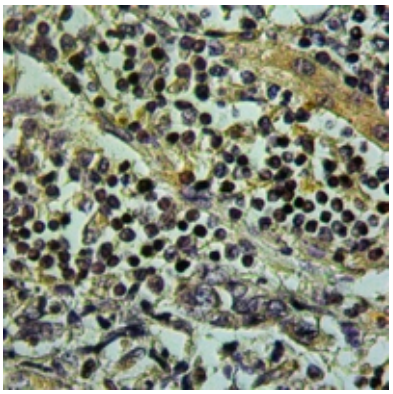
References

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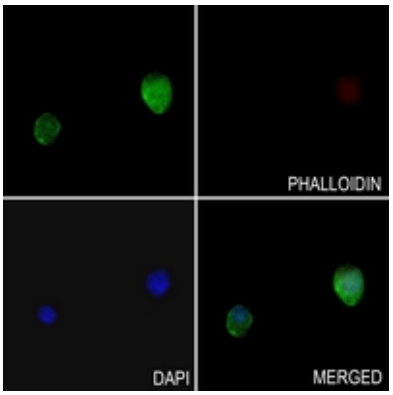
Images



Western blot analysis of TLK1 expression in HEK293T (A), A549 (B) whole cell lysates. (Predicted band size: 86 kD; Observed band size: 87; 64 kD)



Immunohistochemical analysis of TLK1 staining in human liver cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of TLK1 staining in VB2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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