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Anti-TLK1 Antibody

Catalog # AP51568

Product Information

Application	WB, IF/IC
Primary Accession	Q9UKI8
Reactivity	Human, Mouse, Rat, Mk
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~~ 1:1000 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

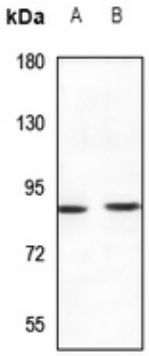
Protein Information

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.

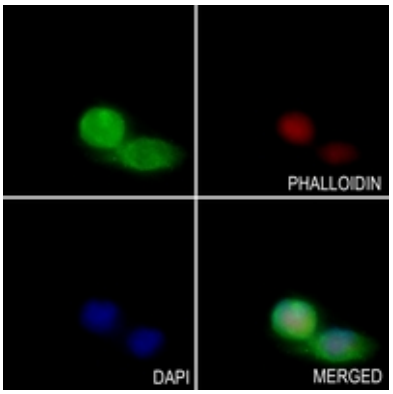
References

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Cabaniols J.-P.,et al.Mol. Biol. Cell 10:4033-4041(1999).
Nagase T.,et al.DNA Res. 2:167-174(1995).
Nakajima D.,et al.DNA Res. 9:99-106(2002).

Images



Western blot analysis of TLK1 expression in HepG2 (A), AML12 (B) whole cell lysates. (Predicted band size: 86 kD; Observed band size: 87 kD)



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'.