

Product name:	TLK1 Rabbit Polyclonal Antibody
Cat number:	ABN18982
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human TLK1. AA range:730-779
Reactivity:	Human,Mouse
Applications:	ICC/IF 1:200-1:1000,ELISA 1:5000-1:10000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Cell-cycle regulated, maximal activity in S-phase. Inactivated by phosphorylation at Ser-743, potentially by CHK1.,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'. ,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family.,similarity:Contains 1 protein kinase domain.,subunit:Heterodimerizes with TLK2. Interacts with ASF1A and ASF1B.,tissue specificity: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.,catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,enzyme regulation:Cell-cycle regulated, maximal activity in S-phase. Inactivated by phosphorylation at Ser-743, potentially by CHK1.,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'. ,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. Ser/Thr protein kinase family.,similarity:Contains 1 protein kinase domain.,subunit:Heterodimerizes with TLK2. Interacts with ASF1A and ASF1B.,tissue specificity: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.,