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Rabbit Anti-TLK2 antibody

SL7925R

Product Name:	TLK2
Chinese Name:	丝氨酸/苏氨酸激酶TLK2抗体
Alias:	PKU alpha; PKU-alpha; Serine/threonine kinase; Serine/threonine protein kinase tousled like 2; Serine/threonine-protein kinase tousled-like 2; TLK 2; TLK-2; tlk2; TLK2_HUMAN; Tousled like kinase 2; Tousled-like kinase 2; MGC44450.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	88kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TLK2:201-300/772
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. Tissue specificity: Widely expressed. Present in fetal placenta, liver, kidney, pancreas, heart and skeletal muscle. Also found in adult cell lines.

Function:
Serine/threonine-protein kinase involved in the process of chromatin assembly and probably also DNA replication, transcription, repair, and chromosome segregation. Phosphorylates the chromatin assembly factors ASF1A AND ASF1B. Phosphorylation of ASF1A prevents its proteasome-mediated degradation, thereby enhancing chromatin assembly. Negative regulator of amino acid starvation-induced autophagy. [CATALYTIC ACTIVITY] ATP + a protein = ADP + a phosphoprotein. [COFACTOR] Magnesium. [ENZYME REGULATION] Cell cycle-regulated, with maximal activity in the S-phase. Rapidly and transiently inhibited by phosphorylation following the generation of DNA double-stranded breaks during S-phase, probably by CHEK1, possibly at Ser-750. This inhibition is cell cycle checkpoint- and ATM-dependent.

Subunit:
Monomer and heterodimer with TLK1. Interacts with ASF1A and ASF1B. Association with 14-3-3 proteins such as YWHAZ regulates subcellular location. May also interact with FEZ1/LZTS1 and FEZ2.

Subcellular Location:
Nucleus. Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton. Note=Colocalizes with the cytoplasmic intermediate filament system during the G1 phase of the cell cycle. Present in the perinuclear region at S phase and in the nucleus at late G2. [ALTERNATIVE PRODUCTS] Event=Alternative splicing; Named isoforms=3; Name=1; IsoId=Q86UE8-1; Sequence=Displayed; Note=No experimental confirmation available; Name=2; IsoId=Q86UE8-2; Sequence=VSP_050573; Name=3; IsoId=Q86UE8-3; Sequence=VSP_050572, VSP_050573.

Tissue Specificity:
Ubiquitous. Detected in placenta, fetal liver, kidney, pancreas, heart and skeletal muscle. Highly expressed in testis. Detected in spleen, thymus, colon, ovary, small intestine, prostate and peripheral blood leukocytes.

Post-translational modifications:
Phosphorylated at Ser-750, probably by CHEK1.

Similarity:
Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. Contains 1 protein kinase domain.

SWISS:
Q86UE8

Gene ID:
11011

Database links:

Entrez Gene: 11011Human

Entrez Gene: 24086Mouse

Entrez Gene: 303592Rat

Omim: 608439Human

SwissProt: Q86UE8Human

SwissProt: O55047Mouse

Unigene: 445078Human

Unigene: 126976Mouse

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.