

**TLK2 Antibody (Center) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP8102c****Specification**

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**TLK2 Antibody (Center) Blocking Peptide - Product Information**

Primary Accession [Q86UE8](#)  
Other Accession [Q9UKI7](#)

**TLK2 Antibody (Center) Blocking Peptide - Additional Information**

**Gene ID** 11011

**Other Names**

Serine/threonine-protein kinase tousled-like 2, HsHPK, PKU-alpha, Tousled-like kinase 2, TLK2

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP8102c](/product/products/AP8102c) was selected from the Center region of human TLK2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**TLK2 Antibody (Center) Blocking Peptide - Protein Information**

**Name** TLK2 ([HGNC:11842](#))

**Function**

Serine/threonine-protein kinase involved in the process of chromatin assembly and probably also DNA replication, transcription, repair, and chromosome segregation (PubMed:[9427565](http://www.uniprot.org/citations/9427565), PubMed:[10523312](http://www.uniprot.org/citations/10523312), PubMed:[11470414](http://www.uniprot.org/citations/11470414), PubMed:[12660173](http://www.uniprot.org/citations/12660173), PubMed:[12955071](http://www.uniprot.org/citations/12955071), PubMed:[29955062](http://www.uniprot.org/citations/29955062), PubMed:[33323470](http://www.uniprot.org/citations/33323470)). Phosphorylates the chromatin assembly factors ASF1A and ASF1B (PubMed:[11470414](http://www.uniprot.org/citations/11470414), PubMed:[11470414](http://www.uniprot.org/citations/11470414)).

[20016786](http://www.uniprot.org/citations/20016786), PubMed: [29955062](http://www.uniprot.org/citations/29955062), PubMed: [35136069](http://www.uniprot.org/citations/35136069)). Phosphorylation of ASF1A prevents its proteasome-mediated degradation, thereby enhancing chromatin assembly (PubMed: [20016786](http://www.uniprot.org/citations/20016786)). Negative regulator of amino acid starvation-induced autophagy (PubMed: [22354037](http://www.uniprot.org/citations/22354037)).

### Cellular Location

Nucleus. Nucleus, nucleoplasm. Cytoplasm, perinuclear region. Cytoplasm, cytoskeleton. Note=Colocalizes with the cytoplasmic intermediate filament system during the G1 phase of the cell cycle (PubMed:10455159). Present in the perinuclear region at S phase and in the nucleus at late G2 (PubMed:10455159)

### Tissue Location

Detected in placenta, fetal liver, kidney, pancreas, heart and skeletal muscle (PubMed:9427565). Highly expressed in testis (PubMed:9427565, PubMed:9662073). Detected in spleen, thymus, colon, ovary, small intestine, prostate and peripheral blood leukocytes (PubMed:9662073). Almost undetectable in liver and lung (PubMed:9662073).

## TLK2 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

## TLK2 Antibody (Center) Blocking Peptide - Images

## TLK2 Antibody (Center) Blocking Peptide - Background

TLK2, a member of the Ser/Thr protein kinase family, is 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. The TLK2 enzyme is cell-cycle regulated, with maximal activity in S-phase. It is inactivated by phosphorylation at Ser-750, potentially by CHK1. TLK2 heterodimerizes with TLK1. This nuclear protein is widely expressed, with presence in fetal placenta, liver, kidney, pancreas, heart and skeletal muscle tissues, and in several adult cell lines.

## TLK2 Antibody (Center) Blocking Peptide - References

Groth, A., et al., EMBO J. 22(7):1676-1687 (2003). Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002). Sillje, H.H., et al., EMBO J. 18(20):5691-5702 (1999). Yamakawa, A., et al., Gene 202 (1-2), 193-201 (1997).