

CLK2 Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP7530a

Specification

CLK2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P49760</u>

CLK2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 1196

Other Names Dual specificity protein kinase CLK2, CDC-like kinase 2, CLK2

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP7530a was selected from the N-term region of human CLK2 . 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.

CLK2 Antibody (N-term) Blocking Peptide - Protein Information

Name CLK2

Function

Dual specificity kinase acting on both serine/threonine and tyrosine-containing substrates. Phosphorylates serine- and arginine- rich (SR) proteins of the spliceosomal complex. May be a constituent of a network of regulatory mechanisms that enable SR proteins to control RNA splicing and can cause redistribution of SR proteins from speckles to a diffuse nucleoplasmic distribution. Acts as a suppressor of hepatic gluconeogenesis and glucose output by repressing PPARGC1A transcriptional activity on gluconeogenic genes via its phosphorylation. Phosphorylates PPP2R5B thereby stimulating the assembly of PP2A phosphatase with the PPP2R5B-AKT1 complex leading to dephosphorylation of AKT1. Phosphorylates: PTPN1, SRSF1 and SRSF3. Regulates the alternative splicing of tissue factor (F3) pre-mRNA in endothelial cells. Phosphorylates PAGE4 at several serine and threonine residues and this phosphorylation attenuates the ability of PAGE4 to potentiate the transcriptional activator activity of JUN (PubMed:28289210).



Cellular Location Nucleus. [Isoform 2]: Nucleus speckle. Note=Co-localizes with serine- and arginine-rich (SR) proteins in the nuclear speckles

Tissue Location Endothelial cells (PubMed:19168442). Expressed in androgen-dependent prostate cancer cells (PubMed:28289210)

CLK2 Antibody (N-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

CLK2 Antibody (N-term) Blocking Peptide - Images

CLK2 Antibody (N-term) Blocking Peptide - Background

This gene encodes a member of the CLK family of dual specificity protein kinases. CLK family members have shown to interact with, and phosphorylate, serine- and arginine-rich (SR) proteins of the spliceosomal complex, which is a part of the regulatory mechanism that enables the SR proteins to control RNA splicing. This protein kinase is involved in the regulation of several cellular processes and may serve as a link between cell cycle progression, apoptosis, and telomere length regulation.

CLK2 Antibody (N-term) Blocking Peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).Winfield, S.L., et al., Genome Res. 7(10):1020-1026 (1997).Lee, K., et al., J. Biol. Chem. 271(44):27299-27303 (1996).Hanes, J., et al., J. Mol. Biol. 244(5):665-672 (1994).