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CLK2 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP16732c

Specification

CLK2 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P49760

CLK2 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 1196

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

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 (Center) 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 (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

CLK2 Antibody (Center) Blocking Peptide - Images

CLK2 Antibody (Center) Blocking Peptide - Background

This gene encodes a member of the CLK family of dualspecificity protein kinases. CLK family members have been shown tointeract with, and phosphorylate, serine- and arginine-rich (SR)proteins of the spliceosomal complex, which is a part of theregulatory mechanism that enables the SR proteins to control RNAsplicing. Note that this gene is distinct from TELO2 gene(GeneID:9894), which shares CLK2 and hCLK2 symbol aliases in commonwith this gene, but encodes a protein that is involved in telomerelength regulation.

CLK2 Antibody (Center) Blocking Peptide - References

Nam, S.Y., et al. J. Biol. Chem. 285(41):31157-31163(2010)Eisenreich, A., et al. Circ. Res. 104(5):589-599(2009)Rendtlew Danielsen, J.M., et al. J. Biol. Chem. 284(7):4140-4147(2009)Castle, J.C., et al. Nat. Genet. 40(12):1416-1425(2008)Jin, J., et al. Curr. Biol. 14(16):1436-1450(2004)