

# CLK2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP50695

## Product Information

---

Application	WB
Primary Accession	<a href="#">P49760</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	60090

## Additional Information

---

Gene ID	1196
Other Names	Dual specificity protein kinase CLK2, CDC-like kinase 2, CLK2
Dilution	WB~~1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

## 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: <a href="#">28289210</a> ).
Cellular Location	Nucleus. [Isoform 2]: Nucleus speckle. Note=Co-localizes with serine- and arginine-rich (SR) proteins in the nuclear speckles

**Tissue Location**

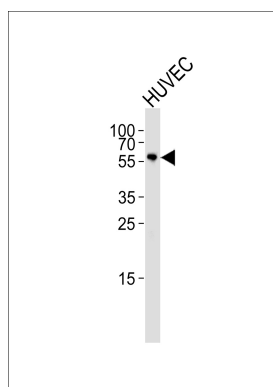
Endothelial cells (PubMed:19168442). Expressed in androgen-dependent prostate cancer cells (PubMed:28289210)

**Background**

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.

**References**

Hanes J.J.,et al.J. Mol. Biol. 244:665-672(1994).  
Winfield S.L.,et al.Genome Res. 7:1020-1026(1997).  
Gregory S.G.,et al.Nature 441:315-321(2006).  
Lee K.,et al.J. Biol. Chem. 271:27299-27303(1996).  
Duncan P.I.,et al.Exp. Cell Res. 241:300-308(1998).

**Images**

Western blot analysis of lysate from HUVEC cell line, using CLK2 Antibody (AP50695). AP50695 was diluted at 1:1000. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35 µg.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.