

### **CLK2 Polyclonal Antibody**

Catalog No: YT0972

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: CLK2

Gene Name: CLK2

**Protein Name :** Dual specificity protein kinase CLK2

P49760

O35491

Human Gene Id: 1196

**Human Swiss Prot** 

No:

Mouse Gene Id: 12748

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

CLK2. AA range:1-50

**Specificity:** CLK2 Polyclonal Antibody detects endogenous levels of CLK2 protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

1/3

Observed Band:

60kD

### **Background:**

CDC like kinase 2(CLK2) Homo sapiens This gene encodes a dual specificity protein kinase that phosphorylates serine/threonine and tyrosine-containing substrates. Activity of this protein regulates serine- and arginine-rich (SR) proteins of the spliceosomal complex, thereby influencing alternative transcript splicing. Chromosomal translocations have been characterized between this locus and the PAFAH1B3 (platelet-activating factor acetylhydrolase 1b, catalytic subunit 3 (29kDa)) gene on chromosome 19, resulting in the production of a fusion protein. Note that this gene is distinct from the TELO2 gene (GeneID:9894), which shares the CLK2 alias, but encodes a protein that is involved in telomere length regulation. There is a pseudogene for this gene on chromosome 7. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2014],

### **Function:**

catalytic activity:ATP + a protein = ADP + a

phosphoprotein.,function: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. Phosphorylates serines, threonines and tyrosines.,PTM:Autophosphorylates on all three types of residues.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. Lammer subfamily.,similarity:Contains 1 protein kinase domain.,

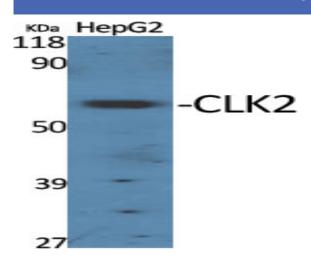
# Subcellular Location:

Nucleus .; [Isoform 1]: Nucleus . Nucleus speckle . Inhibition of phosphorylation at Ser-142 results in accumulation in the nuclear speckle . ; [Isoform 2]: Nucleus speckle . Co-localizes with serine- and arginine-rich (SR) proteins in the nuclear speckles. .

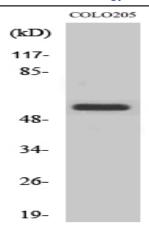
### **Expression:**

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

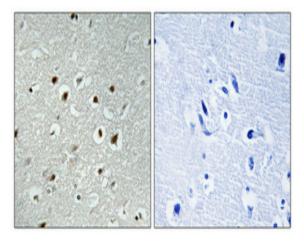
## **Products Images**



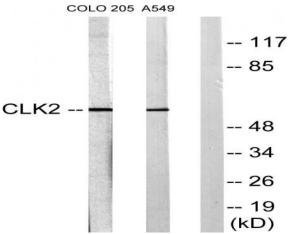
Western Blot analysis of various cells using CLK2 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Western Blot analysis of A549 cells using CLK2 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from COLO205 and A549 cells, using CLK2 Antibody. The lane on the right is blocked with the synthesized peptide.