

For Research Use Only

CDK13 Polyclonal antibody

Catalog Number: 30461-1-AP

2 Publications



Basic Information

Catalog Number:

30461-1-AP

Concentration:

350 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG32897

GenBank Accession Number:

NM_003718.4

GeneID (NCBI):

8621

UNIPROT ID:

Q14004

Full Name:

cell division cycle 2-like 5
(cholinesterase-related cell division
controller)

Calculated MW:

165 kDa

Observed MW:

170 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IHC 1:50-1:500

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB

Species Specificity:

human

Cited Species:

human

**Note-IHC: suggested antigen retrieval with
TE buffer pH 9.0; (*) Alternatively, antigen
retrieval may be performed with citrate
buffer pH 6.0**

Positive Controls:

WB : HEK-293T cells, HeLa cells, Jurkat cells, MDA-MB-468 cells

IHC : human ovary cancer tissue,

IF/ICC : HeLa cells,

Background Information

Cyclin-dependent kinase 13 (CDK13) is also named as CDC2L, CDC2L5, CHED and KIAA1791, and belongs to the CMGC Ser/Thr protein kinase family. Interestingly, in TNBC cells silencing CDK13 provokes cell death without affecting DDR genes. Like CDK12, CDK13 phosphorylates the Ser2 position of the heptad repeat in the CTD of RNA Pol II (PMID:26748711). CDK13/CycK complex is that regulates transcription by phosphorylating serine residues at positions 5 and 2 of the heptapeptide repeats (Y-S-P-T-S-P-S) comprising the C-terminal domain (CTD) of RPB1, the largest subunit of RNA polymerase II (RNAPII). CDK13 is expressed in fetal brain, liver, and muscle, and adult whole brain, hippocampus, and bone marrow (PMID:30904094).

Notable Publications

Author	Pubmed ID	Journal	Application
Yubo Wang	39895086	J Med Chem	WB
Zihao Li	39082894	Carcinogenesis	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

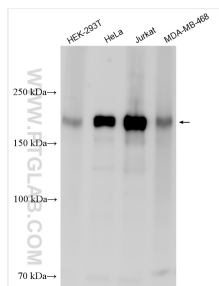
T: 4006900926

E: Proteintech-CN@ptglab.com

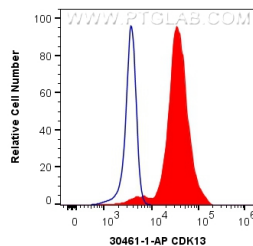
W: ptgcn.com

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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 30461-1-AP (CDK13 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



1X10⁶ K-562 cells were intracellularly stained with 0.4 ug Anti-Human CDK13 (30461-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).

Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 30461-1-AP (CDK13 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CDK13 antibody (30461-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).