

For Research Use Only

CDK13 Polyclonal antibody

Catalog Number: 30461-1-AP

2 Publications



Basic Information

| | | |
|---|---|--|
| Catalog Number: 30461-1-AP | GenBank Accession Number: NM_003718.4 | Purification Method: Antigen affinity purification |
| Size: 150ul , Concentration: 350 ug/ml by Nanodrop; | GeneID (NCBI): 8621 | Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:500 IF/ICC 1:200-1:800 |
| Source: Rabbit | UNIPROT ID: Q14004 | |
| Isotype: IgG | Full Name: cell division cycle 2-like 5 (cholinesterase-related cell division controller) | |
| Immunogen Catalog Number: AG32897 | Calculated MW: 165 kDa | |
| | Observed MW: 170 kDa | |

Applications

| | |
|--|---|
| Tested Applications: WB, IHC, IF/ICC, FC (Intra), ELISA | Positive Controls: WB : HEK-293T cells, HeLa cells, Jurkat cells, MDA-MB-468 cells IHC : human ovary cancer tissue, IF/ICC : HeLa cells, |
| 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 | |

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

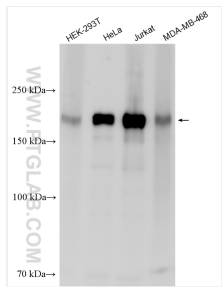
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

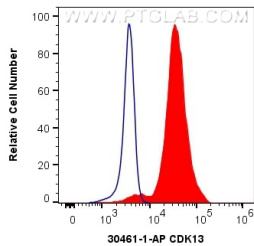
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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Selected Validation Data

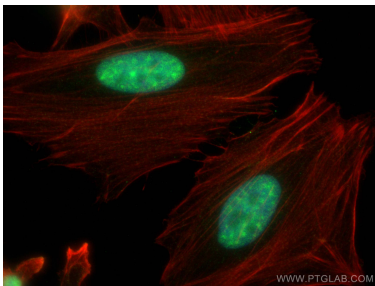


Various lysates were subjected to SDS PAGE followed by western blot with 30461-1-AP (CDK13 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



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).