

For Research Use Only

# CDK3 Polyclonal antibody

Catalog Number: 55103-1-AP **5 Publications**



## Basic Information

**Catalog Number:**

55103-1-AP

**Size:**

150ul, Concentration: 800 ug/ml by Bradford method using BSA as the standard;

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

NM\_001258

**GeneID (NCBI):**

1018

**UNIPROT ID:**

Q00526

**Full Name:**

cyclin-dependent kinase 3

**Calculated MW:**

35 kDa

**Observed MW:**

40-45 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB: 1:1000-1:4000

IHC: 1:100-1:400

IF/ICC: 1:200-1:800

FC (Intra): 0.25 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

**Tested Applications:**

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

**Cited Applications:**

WB, IHC

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse

**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 : mouse brain tissue, MCF-7 cells, Jurkat cells, rat brain tissue

IHC : human breast cancer tissue,

IF/ICC : HeLa cells,

FC (Intra) : HeLa cells,

## Background Information

CDK3 belongs to the protein kinase superfamily, CMGC Ser/Thr protein kinase family and CDC2/CDKX subfamily. It is probably involved in the control of the cell cycle. CDK3 interacts with a yet unknown type of cyclin. It can phosphorylate histone H1. Endogenous Cyclin C/Cdk3 complexes are critical to promote exit from quiescence in an Rb-dependent manner. Cyclin C/Cdk3 complexes is a key regulators of cell cycle reentry in human cells. (PMID: 15130482) The antibody is specific to CDK3.

## Notable Publications

Author	Pubmed ID	Journal	Application
Wen Zhang	31214853	Protein J	WB
Ning Xu	35927229	Cell Death Discov	WB
Nicholas Kwiatkowski	40250405	Cell Chem Biol	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**

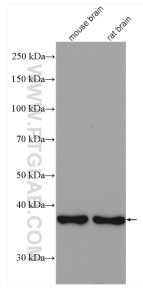
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

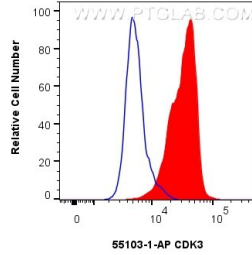
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

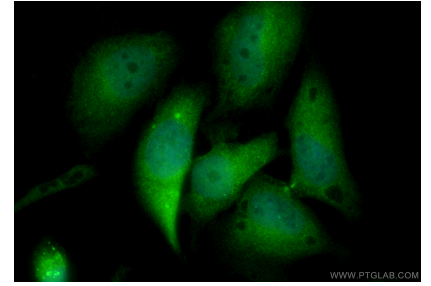
## Selected Validation Data



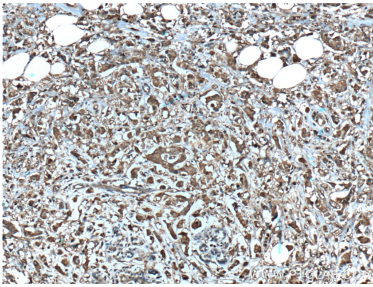
Various lysates were subjected to SDS PAGE followed by western blot with 55103-1-AP (CDK3 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



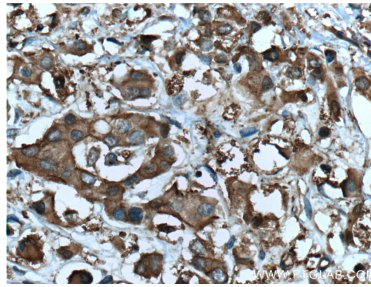
1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug CDK3 Polyclonal antibody (55103-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CDK3 antibody (55103-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 55103-1-AP (CDK3 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 55103-1-AP (CDK3 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).