Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Phospho-CDK1-Y15 Rabbit pAb

Catalog No.: AP0016 12 Publications

Basic Information

Catalog No.
AP0016

Observed MW
34kDa

Calculated MW
27kDa/34kDa

Category
Primary antibody

Applications
WB, IHC, IF, IP

Cross-Reactivity
Human, Mouse, Rat

Background

The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is a catalytic subunit of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle. Mitotic cyclins stably associate with this protein and function as regulatory subunits. The kinase activity of this protein is controlled by cyclin accumulation and destruction through the cell cycle. The phosphorylation and dephosphorylation of this protein also play important regulatory roles in cell cycle control. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Recommended Dilutions

WB	1:500 - 1:1000
IHC	1:50 - 1:200
IF	1:50 - 1:100
IP	1:50 - 1:100

Immunogen Information

Gene ID
983

Swiss Prot
P06493

Immunogen
A synthetic phosphorylated peptide around Y15 of human CDK1 (NP_001777.1).

Synonyms
CDK1;CDC2;CDC28A;P34CDC2

Contact

www.abclonal.com

Product Information

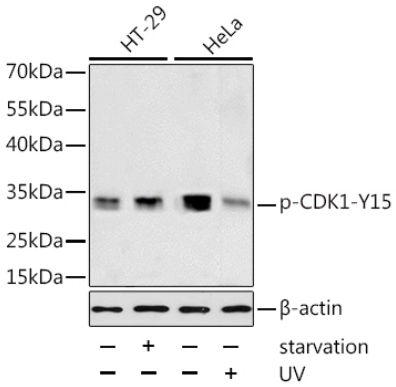
Source
Rabbit

Isotype
IgG

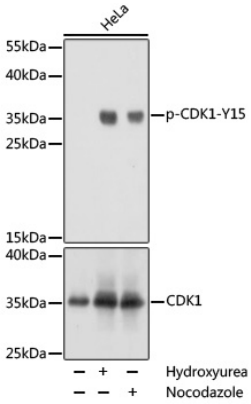
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

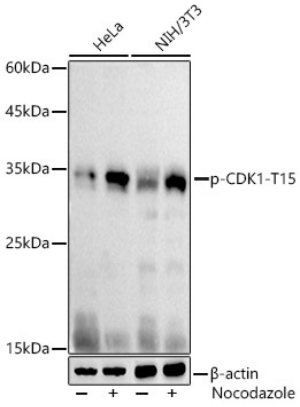
Validation Data



Western blot analysis of extracts of HT-29 and HeLa cells, using Phospho-CDK1-Y15 antibody (AP0016) at 1:1000 dilution. HT-29 cells were treated by serum-starvation overnight. HeLa cells were treated by UV for 15-30 minutes.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% BSA.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1min.

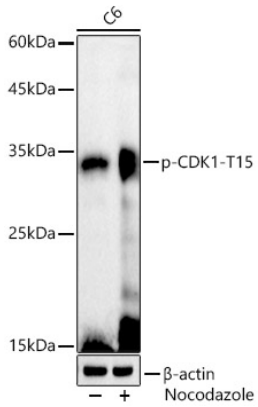


Western blot analysis of extracts of NIH/3T3 cells, using phospho-STK4-T387 pAb (AP0016) at 1:1000 dilution or CDK1 antibody (A0220).HeLa cellls were treated by nocodazole (50 ng/mL) at 37℃ for 20 hours or Hydroxyurea (4 mM) at 37℃ for 20 hours.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% BSA.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1s.

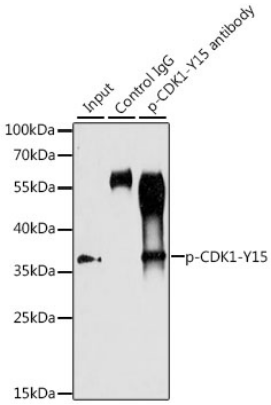


Western blot analysis of extracts of various cell lines, using Phospho-CDK1-T15 antibody (AP0016) at 1:1000 dilution.HeLa and NIH/3T3 cells were treated by nocodazole (50 ng/ml) at 37℃ for 20 hours.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10s.

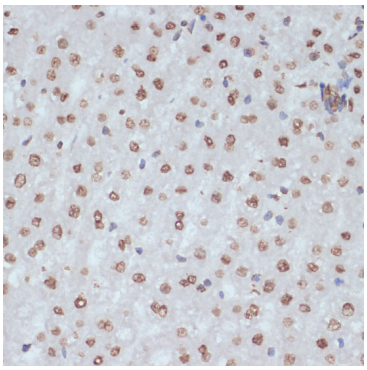
Validation Data



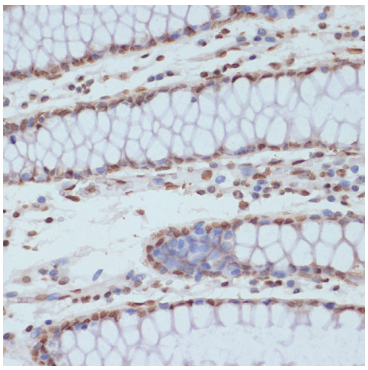
Western blot analysis of extracts of C6 cells, using Phospho-CDK1-T15 antibody (AP0016) at 1:1000 dilution.C6 cells were treated by Nocodazole (50 ng/ml) at 37℃ for 20 hours.
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25ug per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90s.



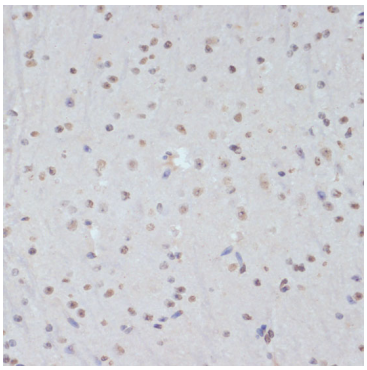
Immunoprecipitation analysis of 200ug extracts of HT-29 cells, using 3 ug Phospho-CDK1-Y15 pAb (AP0016). Western blot was performed from the immunoprecipitate using Phospho-CDK1-Y15 pAb (AP0016) at a dilition of 1:1000. HT-29 cells were treated by Serum-starvation overnight at 37℃.



Immunohistochemistry of paraffin-embedded rat liver using Phospho-CDK1-Y15 antibody (AP0016) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

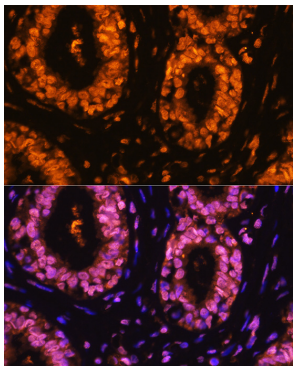


Immunohistochemistry of paraffin-embedded human colon using Phospho-CDK1-Y15 antibody (AP0016) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry of paraffin-embedded mouse brain using Phospho-CDK1-Y15 antibody (AP0016) at dilution of 1:100 (40x lens).Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Validation Data



Immunofluorescence analysis of human breast cancer using Phospho-CDK1-Y15 Rabbit pAb (AP0016) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.