Anti-Phospho-Cdk2 (Y15) Antibody [SN72-04]

ET1611-52

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IP, IF-Tissue
Molecular Wt:	Predicted band size: 34 kDa
Clone number:	SN72-04

Description: In vertebrates, as in yeast, multiple cyclins have been identified, including a total of eight such regulatory proteins in mammals. In contrast to the situation in yeast, the Cdc2 p34 kinase is not the only catalytic subunit identified in vertebrates that can interact with cyclins. While Cdc2 p34 is essential for the G2 to M transition in vertebrate cells, a second Cdc2-related kinase has also been implicated in cell cycle control. This protein, designated cyclin-dependent kinase 2 (Cdk2) p33, also binds to cyclins and its kinase activity is temporally regulated during the cell cycle. Several additional Cdc2 p34-related cyclin dependent kinases have been identified. These include Cdk3-Cdk8, PCTAIRE-1-3 and KKIALRE.

Immunogen: Synthetic phospho-peptide corresponding to residues surrounding Tyr15 of human Cdk2.

Positive control: Hela cell lysate, NIH/3T3 cell lysate, mouse spleen tissue lysate, human breast carcinoma tissue, mouse small intestine tissue.

Subcellular location: Cytoplasm, Cytoskeleton, Endosome, Nucleus.

Database links: SwissProt: P24941 Human | P97377 Mouse | Q63699 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:200-1:1,000
IP	Use at an assay dependent concentration.
IF-Tissue	1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

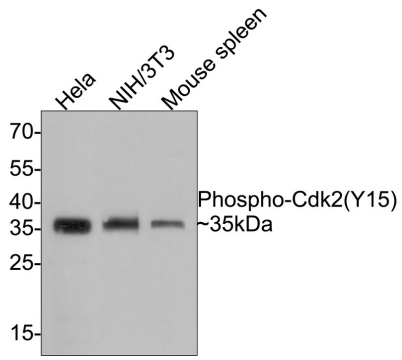

Fig1: Western blot analysis of Phospho-Cdk2 (Y15) on different lysates with Rabbit anti-Phospho-Cdk2 (Y15) antibody (ET1611-52) at 1/1,000 dilution.

Lane 1: Hela cell lysate (10 µg/Lane)
Lane 2: NIH/3T3 cell lysate (10 µg/Lane)
Lane 3: Mouse spleen tissue lysate (20 µg/Lane)

Predicted band size: 34 kDa
Observed band size: 35 kDa

Exposure time: 1 minute;

12% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1611-52) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

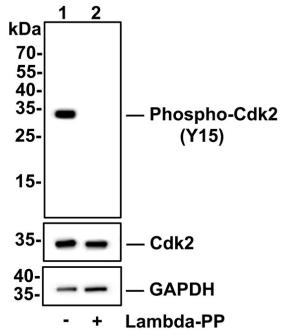

Fig2: Western blot analysis of Phospho-Cdk2(Y15) on Hela cell lysates.

Lane 1: Hela cells, whole cell lysate, 10ug/lane
Lane 2: Hela cells treated with 2.8ug/ul lambda-PP for 30 minutes, whole cell lysates, 10ug/lane

All lanes :
Anti-Phospho-Cdk2(Y15) antibody (ET1611-52) at 1/500 dilution. Anti-Cdk2 antibody (ET1602-6) at 1/500 dilution. Anti-GAPDH antibody (ET1601-4) at 1/10,000 dilution. Goat Anti-Rabbit IgG H&L (HRP) (HA1001) at 1/200,000 dilution.

Predicted band size: 34 kDa
Observed band size: 34 kDa

Blocking and diluting buffer: 5% BSA.

Exposure time: 30 seconds

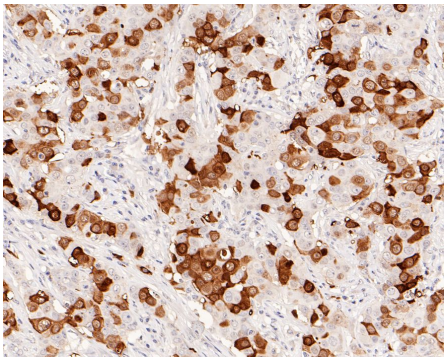

Fig3: Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue with Rabbit anti-Phospho-Cdk2 (Y15) antibody (ET1611-52) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-52) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

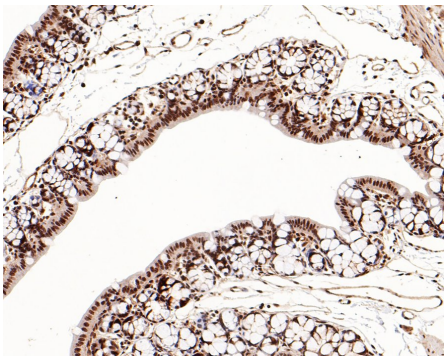

Fig4: Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue with Rabbit anti-Phospho-Cdk2 (Y15) antibody (ET1611-52) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-52) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

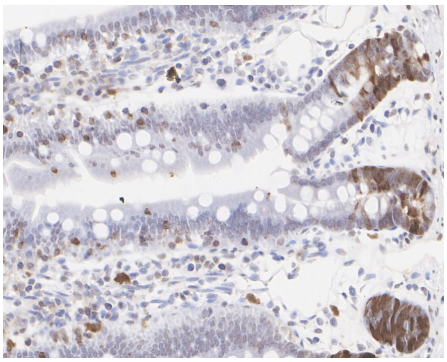

Fig5: Immunohistochemical analysis of paraffin-embedded rat small intestine tissue with Rabbit anti-Phospho-Cdk2 (Y15) antibody (ET1611-52) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1611-52) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References