

[KO Validated] CDK4 Rabbit PolymAb®

Catalog No.: A23521PM **KO Validated**

Basic Information

Observed MW

34kDa

Calculated MW

34kDa

Category

Primary antibody

Applications

WB,IP,IF/ICC,IF-P,IHC-P,ELISA

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 highly similar to the gene products of *S. cerevisiae* cdc28 and *S. pombe* cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of this gene have been reported.

Recommended Dilutions

WB	1:1000 - 1:12000
IP	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
IF/ICC	1:200 - 1:800
IF-P	1:200 - 1:800
IHC-P	1:200 - 1:800
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

1019

Swiss Prot

P11802

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

CMM3; PSK-J3

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

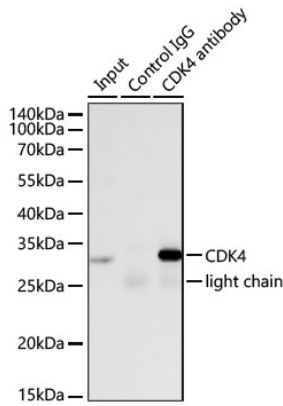
Contact

 | 400-999-6126

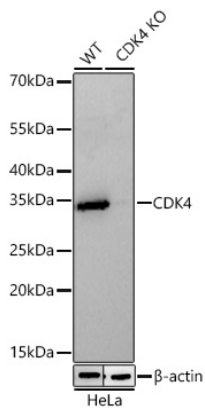
 | cn.market@abclonal.com.cn

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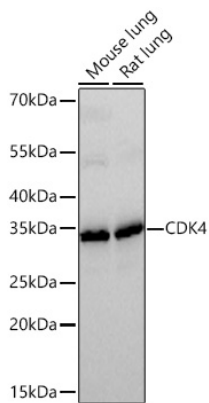
Validation Data



Immunoprecipitation of CDK4 from 300 µg extracts of HeLa cells was performed using 2 µg of [KO Validated] CDK4 Rabbit PolymAb® (A23521PM). Rabbit IgG isotype control (AC042) was used to precipitate the Control IgG sample. IP samples were eluted with 1X reducing Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM) at a dilution of 1:3000.

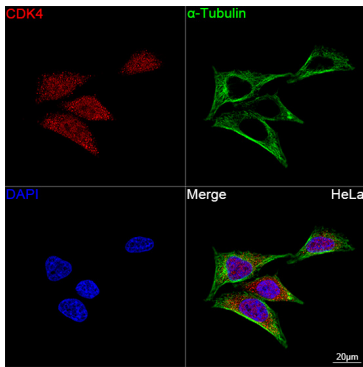


Western blot analysis of lysates from wild type (WT) and CDK4 knockout (KO) HeLa cells using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM) at 1:3000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.

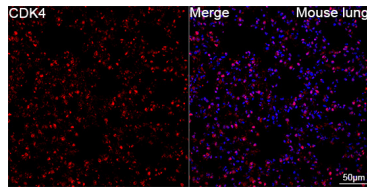


Western blot analysis of various lysates using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM) at 1:1000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.

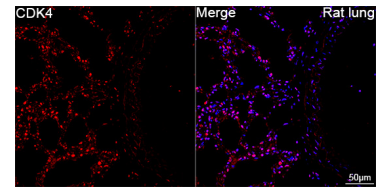
Validation Data



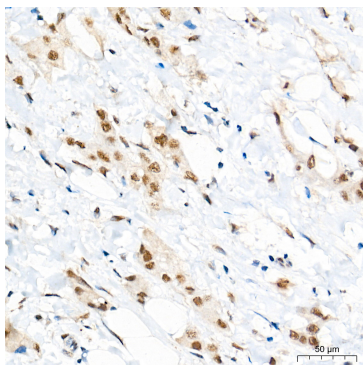
Confocal imaging of HeLa cells using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



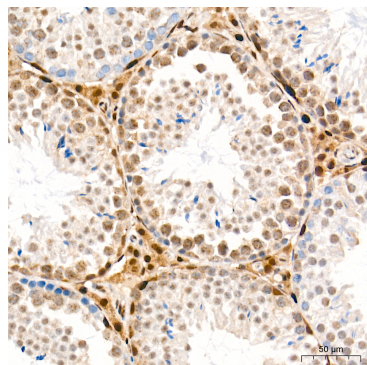
Confocal imaging of HeLa cells using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



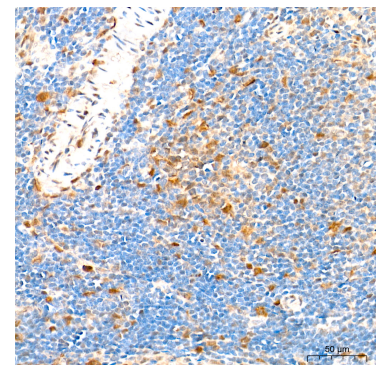
Confocal imaging of paraffin-embedded Rat lung tissue using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM) at a dilution of 1:600 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM) at a dilution of 1:600 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat spleen tissue using [KO Validated] CDK4 Rabbit PolymAb® (A23521PM) at a dilution of 1:600 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.