

## Anti-CDK4 Antibody (2F371)

### Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Molecular Weight:	Theoretical: 34 kDa. Actual: 32 kDa.
Clone:	2F371
Purification:	Protein A purified

### Applications

#### Verified Activity:

1. Paraformaldehyde-fixed, paraffin embedded Mouse Lung; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.
2. Paraformaldehyde-fixed, paraffin embedded Rat Lung; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.
3. Paraformaldehyde-fixed, paraffin embedded Human Lung Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.
4. Paraformaldehyde-fixed, paraffin embedded Mouse Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.
5. Paraformaldehyde-fixed, paraffin embedded Rat Liver; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.
6. Paraformaldehyde-fixed, paraffin embedded Mouse Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.
7. Paraformaldehyde-fixed, paraffin embedded Rat Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.
8. Paraformaldehyde-fixed, paraffin embedded Human Cervical Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.
9. Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with CDK4 Monoclonal Antibody, Unconjugated (TMAB-04163) at 1: 200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L Secondary Antibody-HRP and DAB staining.

10. 25 µg total protein per lane of various lysates (see on figure) probed with CDK4 monoclonal antibody, unconjugated (TMAB-04163) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r. T. for 60 min.

11. The MCF-7 (H) cells were fixed with 4% PFA (10 min at r. T.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, the cells then were incubated in 5% BSA to block non-specific protein-protein interactions (30 min at r. T.). Primary Antibody (green): Rabbit Anti-CDK4 antibody (TMAB-04163, 1:100); Secondary Antibody (white blue): Goat anti-Rabbit IgG-BF488: 1 µg/test. Blank control (black): PBS. Acquisition of 20,000 events was performed.

12. 4% Paraformaldehyde-fixed MCF-7 (H) cell; Triton X-100 at r. T. for 20 min; Antibody incubation with (CDK4) monoclonal Antibody, unconjugated (TMAB-04163) 1:100, 90 min at 37°C; followed by conjugated Goat Anti-Rabbit IgG antibody (green) at 37°C for 90 min, DAPI (blue) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control.

Application: WB, ICC/IF, IP, IHC-P, IHC-Fr, IF, FCM

Recommended WB: 1:500-2000; ICC/IF: 1:50-200; IP: 1:20-50; IHC-P: 1:50-200; IHC-Fr: 1:50-200; IF: 1:50-200; FCM: 1:50-100

### Properties

Stability & Storage: Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

### Antigen Details

Immunogen: A synthesized peptide: human CDK4

Antigen Species: Human

Gene ID: 1019

Uniprot ID: P11802

### Research Background

Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G1/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G1 phase.

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