

CDK4 Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX00064

Clone# RR668

Predicted Molecular Wt: 34kDa

Purity: ProA affinity purified IgG

Species Cross-reactivity: Human

Form: Liquid

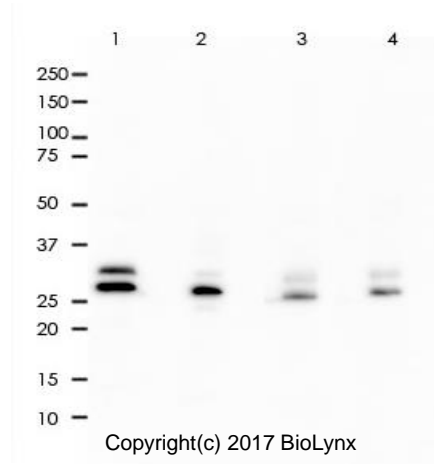
Species cross-reactivity determined by WB

Swissprot ID: P11802

Applications: WB IHC-P IF/ICC FC IP

Background:

Cyclin-dependent kinase-4 (CDK4) is a protein-serine kinase involved in the cell cycle. It is essential for the G1- to S-phase transition during the cell cycle and its expression is primarily controlled at the transcriptional level (PMID:17253961). CCND1-CDK4 axis is not only critical in glial tumor cells but also in stromal-derived cells in the surrounding tumor microenvironment that are vital to sustain tumor outgrowth (PMID:21844184).



Immunogen:

A synthetic peptide corresponding to the C-term of CDK4 was used as an immunogen.

All lanes: Anti-CDK4 antibody at 1:400 dilution

Predicted MW: 34 kDa

Observed MW: 34 kDa

Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

Storage conditions:

-20°C.

Storage instructions:

Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

Recommended Dilutions:

WB: 1:1,000 - 1:2,000
IHC-P: 1:100 - 1:200
IF/ICC: 1:10 - 1:50
FC: 1:40 - 1:200
IP: 1:20

Lane 1: Hela

Lane 2: JurKat

Lane 3: K562

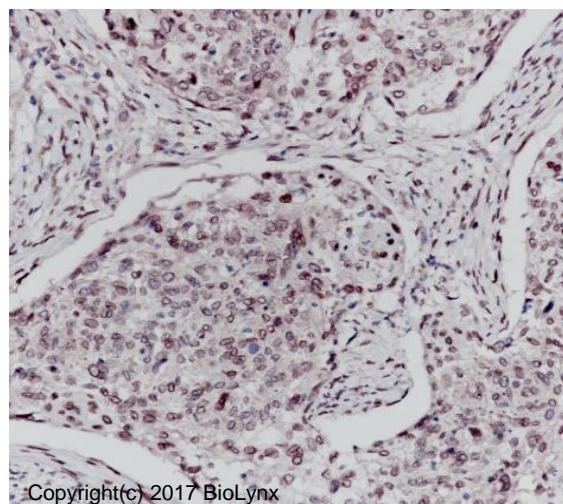
Lane 4: A431

Lysate at 10 µg per lane

2nd Ab:

GAR HRP(H+L) 1:5,000

Exposure: 20s

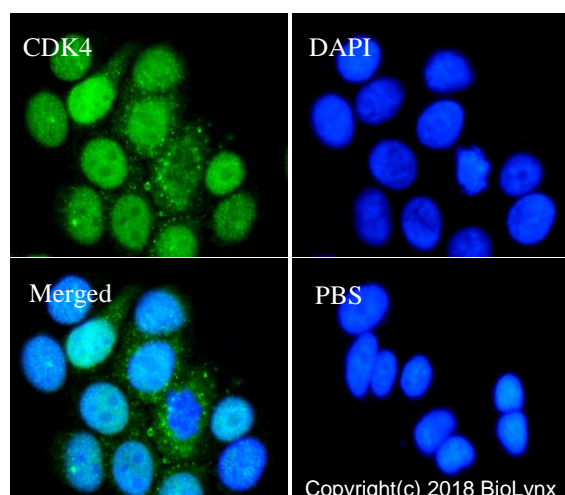


Background References:

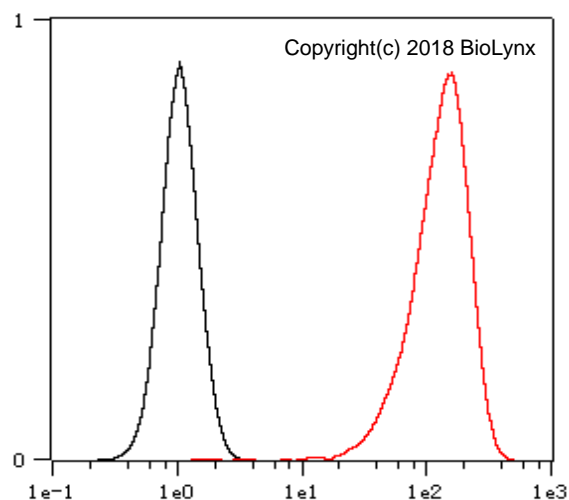
1. Ma L et al. Oncotarget 8:4125-4135 (2017).

2. Lv XJ et al. Oncol Rep N/A:N/A (2016).

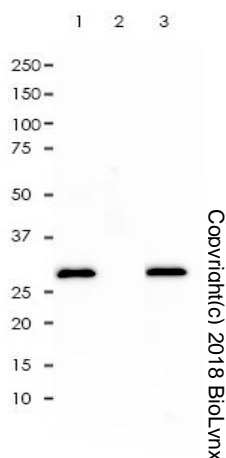
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of cervix cancer tissue labelling CDK4 with RR668 at 1:200. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0.



RR668 staining CDK4 in MCF-7 cells by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:10) at 4°C. An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG polyclonal was used as the secondary antibody (1:500). DAPI (blue) was used as the nuclear counter stain. Control: PBS and secondary antibody, An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG (1:500).



Overlay histogram showing Hela cells stained with RR668 (Red). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR668, 1:200 dilution) in 1x PBS/1% BSA for 30 min at room temperature. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at room temperature. Unlabelled sample (Black) was used as a control.



CDK4 was immunoprecipitated from 0.4mg of Jurkat whole cell lysate with RR668 at 1:20 dilution.

2nd Ab:

GAR HRP for IP 1:500

Lane 1: RR668 IP in Jurkat whole cell lysate

Lane 2: PBS instead of RR668 in Jurkat whole cell lysate

Lane 3: Jurkat whole cell lysate, 10 µg (input)

Exposure: 120s

Product QC'd by:



For research use only. Not for use in diagnostic or therapeutic applications.