

Datasheet for ABIN4907874
anti-CDK4 antibody

2 Images



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Overview

Quantity:	100 µL
Target:	CDK4
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CDK4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This CDK4 antibody is generated from a mouse immunized with a recombinant protein.
Clone:	9C3
Isotype:	IgG2a
Cross-Reactivity:	Human, Mouse
Purification:	Purified by Protein G.

Target Details

Target:	CDK4
Alternative Name:	CDK4 (CDK4 Products)
Background:	Synonyms: CMM3, PSK-J3, Cyclin-dependent kinase 4, Cell division protein kinase 4, CDK4 Background: Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate

Target Details

and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/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 G(1) phase.

Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.

Gene ID: 1019

UniProt: [P11802](#)

Pathways: [Cell Division Cycle](#), [Mitotic G1-G1/S Phases](#), [Regulation of Cell Size](#)

Application Details

Application Notes: WB 1:300-5000
IHC-P 1:200-400

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.5 µg/µL

Buffer: 0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.

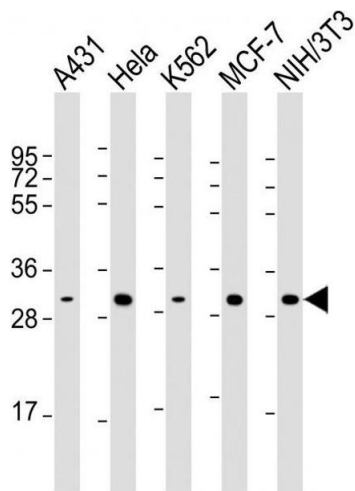
Preservative: ProClin

Precaution of Use: This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.

Storage: -20 °C

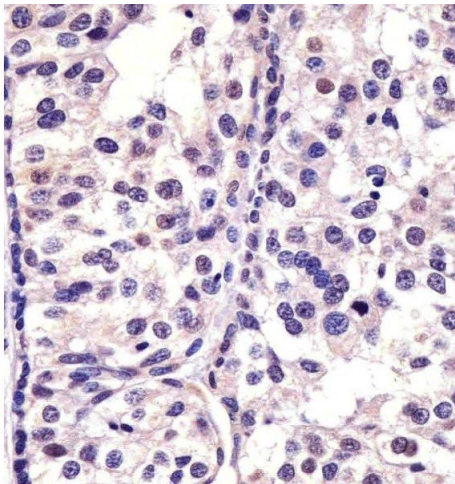
Storage Comment: Store at -20°C for 12 months.

Expiry Date: 12 months



Western Blotting

Image 1. Lane 1: A431 Cell lysates, Lane 2: HeLa Cell lysates, Lane 3: K562 Cell lysates, Lane 4: MCF-7 Cell lysates, Lane 5: NIH/3T3 Cell lysates, probed with CDK4 (1529CT850.162.73) Monoclonal Antibody, unconjugated (bsm-51314M) at 1:2000 overnight at 4°C followed by a conjugated secondary antibody for 60 minutes at 37°C.



Immunohistochemistry (Paraffin-embedded Sections)

Image 2. Paraformaldehyde-fixed, paraffin embedded human breast carcinoma, Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min, Block endogenous peroxidase by 3% hydrogen peroxide for 15 minutes, Blocking buffer (3% BSA) at room temperature for 30min, Antibody incubation with CDK4 (1529CT850.162.73) Monoclonal Antibody (bsm-51314M) at 1:25 for 1 hour at 37°C, followed by a conjugated secondary antibody for 20 minutes and DAB staining