

**DATASHEET**

**CDK4 Mouse Monoclonal Antibody(C3668)**

CAT. NO. AMA03280

**KEY FEATURES**

Target	CDK4	Source / Host	Mouse
Reactivity	Human, Mouse	Clonality	Monoclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG2a kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

**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 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.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:50 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Mouse monoclonal antibody to CDK4
Specificity	Recognizes endogenous levels of CDK4 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human CDK4. The exact sequence is proprietary.
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 33 kD; Observed: 33 kD
Form/Buffer	Mouse IgG2a kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	Cyclin-dependent kinase 4; Cell division protein kinase 4; PSK-J3
Gene Symbol	CDK4
Entrez Gene	1019(Human); 12567(Mouse)
SwissProt	P11802(Human); P30285(Mouse)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

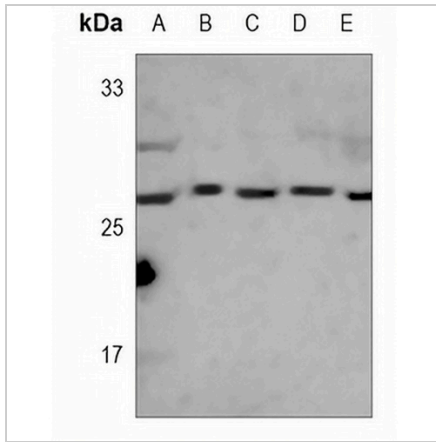
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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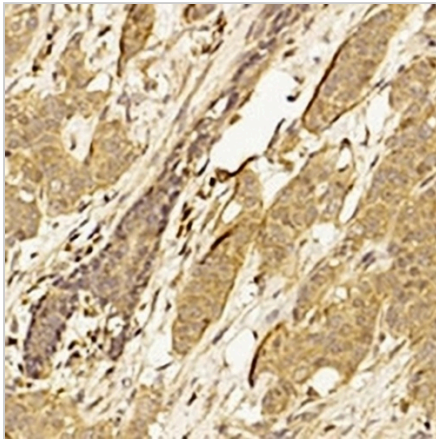
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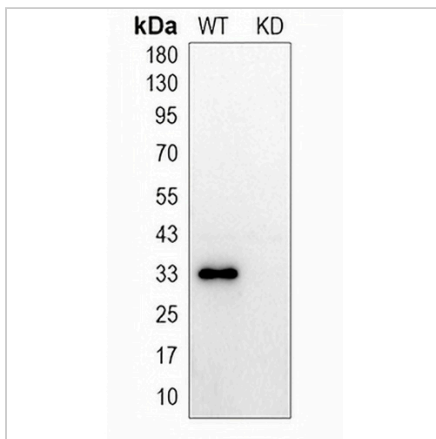
**DATA**



Western blot analysis of CDK4 expression in A431 (A), HeLa (B), K562 (C), MCF7 (D), NIH3T3 (E) whole cell lysates. (Predicted band size: 33 kD; Observed band size: 33 kD)



Immunohistochemical analysis of CDK4 staining in human breast carcinoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Western blot analysis of CDK4 expression in wild type (WT) and knockdown (KD) HT1080 cell lysates.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.