

Datasheet for ABIN669891
anti-CDK1 antibody (AA 201-297)

3 Images

7 Publications

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Overview

Quantity:	100 µL
Target:	CDK1
Binding Specificity:	AA 201-297
Reactivity:	Human, Mouse, Rat, Dog, Sheep
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CDK1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from mouse CDK1
Isotype:	IgG
Cross-Reactivity:	Dog, Human, Mouse, Rat, Sheep
Predicted Reactivity:	Cow
Purification:	Purified by Protein A.

Target Details

Target:	CDK1
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Target Details

Alternative Name:	CDK1 (CDK1 Products)
Background:	<p>Synonyms: Cdc2, Cdc2a, p34, Cyclin-dependent kinase 1, CDK1, Cell division control protein 2 homolog, Cell division protein kinase 1, p34 protein kinase, Cdkn1</p> <p>Background: The cell division control protein cdc2, also known as cyclin dependent kinase 1 (Cdk1) or p34/cdk1, plays a key role in the control of the eukaryotic cell cycle, where it is required for entry into S phase and mitosis. Cdc2 exists as a complex with both cyclin A and cyclin B. The best characterized of these associations is the Cdc2 p34 cyclin B complex, which is required for the G2 to M phase transition. Activation of Cdc2 is controlled at several steps including cyclin binding and phosphorylation of threonine 161. However, the critical regulatory step in activating cdc2 during progression into mitosis appears to be dephosphorylation of Tyr15 and Tyr14. Phosphorylation at Tyr15 and inhibition of Cdc2 is carried out by WEE1 and MIK protein kinases while Tyr15 dephosphorylation and activation of Cdc2 is carried out by the cdc25 phosphatase. The isoform CDC2deltaT is found in breast cancer tissues. Furthermore, cdc2/Cdk1 is a key mediator of neuronal cell death in brain development and degeneration.</p>
Gene ID:	12534
UniProt:	P11440
Pathways:	Cell Division Cycle , Fc-epsilon Receptor Signaling Pathway , Neurotrophin Signaling Pathway , Activation of Innate immune Response , Mitotic G1-G1/S Phases , DNA Replication , M Phase , Toll-Like Receptors Cascades , Synthesis of DNA

Application Details

Application Notes:	WB 1:300-5000 ELISA 1:500-1000 FCM 1:20-100 IHC-P 1:200-400 IHC-F 1:100-500 IF(IHC-P) 1:50-200 IF(IHC-F) 1:50-200 IF(ICC) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
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Handling

Concentration:	1 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:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

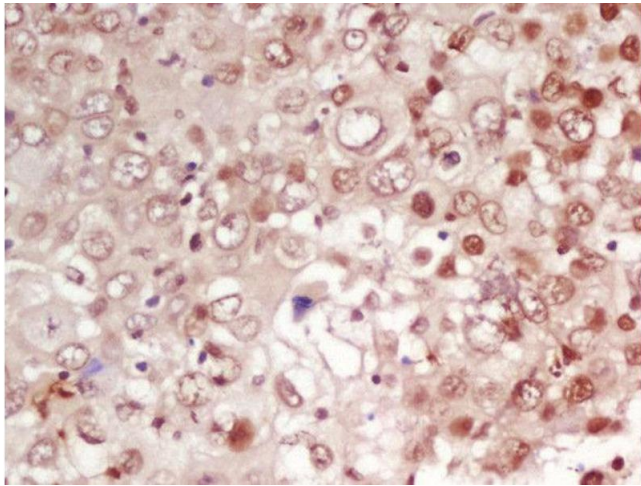
Product cited in: Ghate, Das, Chaudhuri, Panja, Mandal: "Sundew plant, a potential source of anti-inflammatory agents, selectively induces G2/M arrest and apoptosis in MCF-7 cells through upregulation of p53 and Bax/Bcl-2 ratio." in: **Cell death discovery**, Vol. 2, pp. 15062, (2016) ([PubMed](#)).

He, Zhang, Gan, Xu, Tang: "Expression of hyperpolarization-activated cyclic nucleotide-gated channel isoforms in a canine model of atrial fibrillation." in: **Experimental and therapeutic medicine**, Vol. 12, Issue 1, pp. 433-436, (2016) ([PubMed](#)).

Dai, Ye, Peng, Zhou, Bai, Xiao, Ma, Zhou, Tang, Yao, Cao, Qin, Liu, Tan: "Aptamer TY04 inhibits the growth of multiple myeloma cells via cell cycle arrest." in: **Tumour biology**, Vol. 35, Issue 8, pp. 7561-8, (2014) ([PubMed](#)).

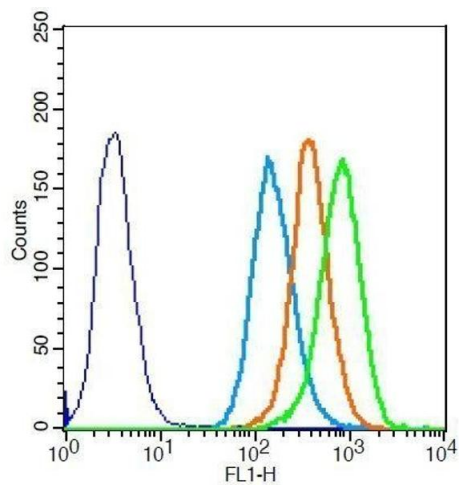
Haolong, Du, Hongchao, Yang, Wei, Hua, Wenliang, Lei, Po: "Enterovirus 71 VP1 activates calmodulin-dependent protein kinase II and results in the rearrangement of vimentin in human astrocyte cells." in: **PLoS ONE**, Vol. 8, Issue 9, pp. e73900, (2013) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)



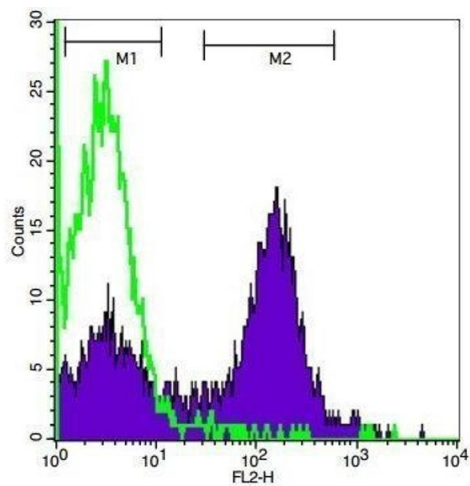
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin embedded human laryngeal carcinoma labeled with Rabbit Anti-CDK1 Polyclonal Antibody, Unconjugated (ABIN669891) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Flow Cytometry

Image 2. MCF-7 cells probed with Rabbit Anti-CDK1 Polyclonal Antibody .



Flow Cytometry

Image 3. Mouse spleen cells probed with Rabbit Anti-CDK1 Polyclonal Antibody, PE Conjugated at 1:50 for 30 minutes