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Rabbit Anti-Cyclin D1 antibody

SL0623R

Product Name:	Cyclin D1
Chinese Name:	周期素D1抗体
Alias:	CyclinD1; Cyclin-D1; B cell ccl/lymphoma 1; B cell leukemia 1; B-cell CLL/lymphoma 1; B-cell leukemia 1; B-cell lymphoma 1 protein; BCL-1; BCL1; BCL1 oncogene; CCND 1; CCND1; CCND1 protein; CCND1/FSTL3 fusion gene, included; CCND1/IGHG1 fusion gene; CCND1/IGHG1 fusion gene, included; CCND1/IGLC1 fusion gene, included; CCND1/PTH fusion gene, included; Parathyroid adenomatosis 1; PRAD1; FSTL3; CCND1_HUMAN; AI327039; B cell lymphoma 1 protein; BCL 1; BCL-1; BCL-1 oncogene; BCL1 oncogene; CCND1/FSTL3 fusion gene, included; cD1; Cyl 1; D11S287E; G1/S specific cyclin D1; G1/S-specific cyclin-D1.
文献引用 PubMed :	**Specific References(16)**|SL0623R has been referenced in 16 publications. **[IF=7.60]**Teng, I., et al. "Phospholipid-functionalized mesoporous silica nanocarriers for selective photodynamic therapy of cancer." Biomaterials (2013).**WB;Mouse**. PubMed:23810081 **[IF=4.04]**Wang, Y., et al. "Elevated toll-like receptor 3 inhibits pancreatic b-cell proliferation through G1 phase cell cycle arrest." Molecular and Cellular Endocrinology (2013)**Mouse**. PubMed:23850521 **[IF=3.56]**Tan, Shi, et al. "Musashi2 modulates K562 leukemic cell proliferation and apoptosis involving the MAPK pathway."Experimental Cell Research?(2013).**WB;Human**. PubMed:24076374 **[IF=3.33]**Chen, Jie, et al. "Targeting SPARC by lentivirus-mediated RNA interference inhibits cervical cancer cell growth and metastasis." BMC cancer 12.1 (2012):

464.**WB;Human**.

PubMed:23050783

[IF=2.27]Li, M., et al. "miR-34c works downstream of p53 leading to dairy goat male germline stem-cell (mGSCs) apoptosis." Cell Proliferation 46.2 (2013): 223-231.**WB;Goat**.

PubMed:23510477

[IF=2.75]Ye, Bengui, et al. "Anti-tumor activity and relative mechanism of ethanolic extract of Marsdenia tenacissima (Asclepiadaceae) against human hematologic neoplasm in vitro and in vivo." Journal of Ethnopharmacology (2014).**WB;Human**.

PubMed:24583069

[IF=2.41]Shi, Yongguo, et al. "Long non-coding RNA Loc554202 regulates proliferation and migration in breast cancer cells." Biochemical and Biophysical Research Communications (2014).**WB;Human**.

PubMed:24631686

[IF=2.69]Lin, Caiyu, et al. "Lithocarpus Polystachyus Rehd Leaf Aqueous Extract Inhibits Human Breast Cancer Growth In Vitro and In Vivo." Nutrition and Cancer (2014).**WB;Human**.

PubMed:24660968

[IF=2.28]Wang, Haihe, et al. "RBP-J-interacting and tubulin-associated protein induces apoptosis and cell cycle arrest in human hepatocellular carcinoma by activating the p53-Fbxw7 pathway." Biochemical and Biophysical Research Communications (2014).**WB;Human**.

PubMed:25445601

[IF=1.99]He, Xiangming, et al. "CDK2-AP1 inhibits growth of breast cancer cells by regulating cell cycle and increasing docetaxel sensitivity in vivo and in vitro." Cancer Cell International 14.1 (2014): 130.**WB;Human**.

PubMed:25550687

[IF=2.08]Zhang, Jihong, et al. "Interleukin 18 augments growth ability via NF-κB and p38/ATF2 pathways by targeting cylin B1, cyclin B2, cylin A2, and Bcl-2 in BRL-3A rat liver cells." Gene (2015).**WB;**

PubMed:25752290

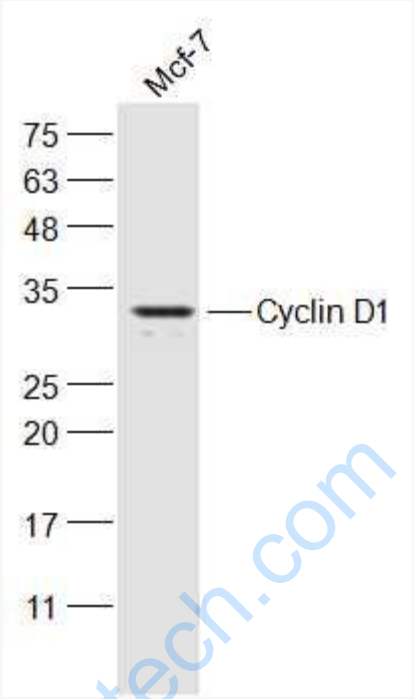
[IF=2.84]Yang, Ning, et al. "SOX 1, contrary to SOX 2, suppresses proliferation,

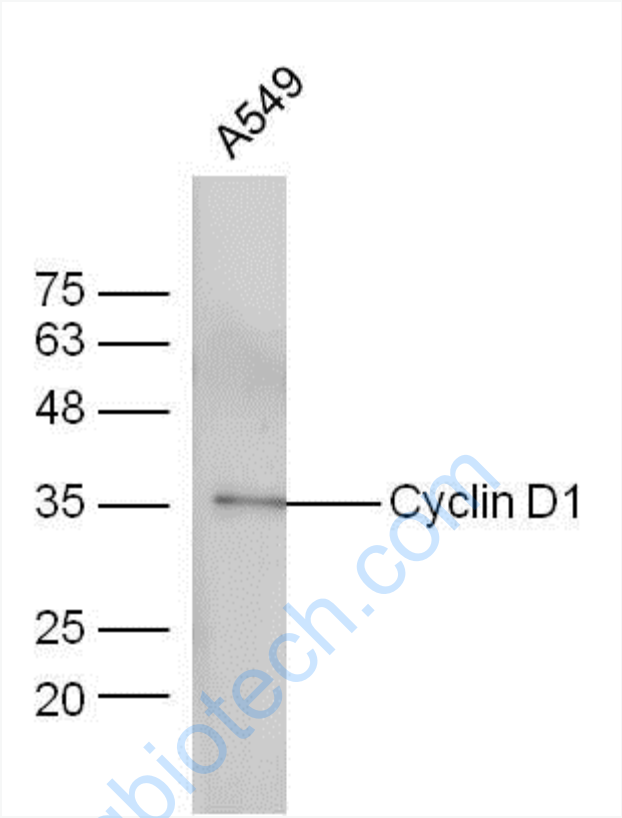
	migration, and invasion in human laryngeal squamous cell carcinoma by inhibiting the Wnt/β-catenin pathway." Tumor Biology (2015): 1-11.**WB;Human**. PubMed:26040764 **[IF=3.06]**Wang, Yang, et al. "Total flavonoid aglycones extract in Radix Scutellariae inhibites lung carcinoma and lung metastasis by affecting cell cycle and DNA synthesis." Journal of Ethnopharmacology (2016).**WB;Human**. PubMed:27444692 **[IF=2.58]**Jiang, Xiao-Hua, et al. "Effects of hepatitis C virus core protein and nonstructural protein 4B on the Wnt/β-catenin pathway." BMC microbiology 17.1 (2017): 124.**WB;Human**. PubMed:28545480 **[IF=1.56]**Huang, Chao, et al. "Analysis of different components in the peritumoral tissue microenvironment of colorectal cancer: A potential prospect in tumorigenesis. Corrigendum in/10.3892/mmr. 2016.5882." Molecular Medicine Reports 14.3 (2016): 2555-2565.**IHC-P;Human**. PubMed:27484148 **[IF=3.13]**Zhang, Wen-feng, et al. "Angelica polysaccharides inhibit the growth and promote the apoptosis of U251 glioma cells in vitro and in vivo." Phytomedicine (2017).**Human**. PubMed:0
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1μg/TestIF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	32kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Cyclin D1:61-110/295
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year

	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance throughout the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with tumor suppressor protein Rb and the expression of this gene is regulated positively by Rb. Mutations, amplification and overexpression of this gene, which alters cell cycle progression, are observed frequently in a variety of tumors and may contribute to tumorigenesis. [provided by RefSeq, Jul 2008]. **Function:** Regulatory component of the cyclin D1-CDK4 (DC) complexthat phosphorylates and inhibits members of the retinoblastoma (RB)protein family including RB1 and regulates the cell-cycle duringG(1)/S transition. Phosphorylation of RB1 allows dissociation ofthe transcription factor E2F from the RB/E2F complex and thesubsequent transcription of E2F target genes which are responsiblefor the progression through the G(1) phase. Hypophosphorylates RB1in early G(1) phase. Cyclin D-CDK4 complexes are major integratorsof various mitogenenic and antimitogenic signals. Also substratefor SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent mannerand repressing its transcriptional activity. Component of theternary complex, cyclin D1/CDK4/CDKN1B, required for nucleartranslocation and activity of the cyclin D-CDK4 complex. **Subunit:** Interacts with FBXO4. Interacts witheither CDK4 or CDK6 protein kinase to form a serine/threoninekinase holoenzyme complex. The cyclin subunit imparts substratespecificity to the complex. Component of the ternary complexCCND1/CDK4/CDKN1B required for nuclear translocation and modulationof CDK4-mediated kinase activity. Interacts directly with CDKN1B.Interacts with UHRF2; the interaction ubiquitinates CCND1 andappears to occur independently of phosphorylation. Can form similarcomplexes with either CDKN1A or CDKN2A. Interacts with USP2. **Subcellular Location:** Nucleus. Cytoplasm. Membrane. Note=CyclinD-CDK4 complexes accumulate at the nuclear membrane and are thentranslocated to the nucleus through interaction with KIP/CIP familymembers. **Post-translational modifications:** Phosphorylation at Thr-286 by MAP kinases is required forubiquitination and degradation following DNA damage. It probablyplays an essential role for recognition by the FBXO31 component ofSCF (SKP1-cullin-F-box) protein ligase complex.

	Ubiquitinated, primarily as 'Lys-48'-linkedpolyubiquitination. Ubiquitinated by a SCF (SKP1-CUL1-F-boxprotein) ubiquitin-protein ligase complex containing FBXO4 andCRYAB. Following DNA damage it is ubiquitinated by some SCF(SKP1-cullin-F-box) protein ligase complex containing FBXO31.SCF-type ubiquitination is dependent on Thr-286 phosphorylation (Bysimilarity). Ubiquitinated also by UHRF2 apparently in aphosphorylation-independent manner. Ubiquitination leads to itsdegradation and G1 arrest. Deubiquitinated by USP2; leading to itsstabilization. **DISEASE:** Note=A chromosomal aberration involving CCND1 may be acause of B-lymphocytic malignancy, particularly mantle-celllymphoma (MCL). Translocation t(11;14)(q13;q32) with immunoglobulingene regions. Activation of CCND1 may be oncogenic by directlyaltering progression through the cell cycle. Note=A chromosomal aberration involving CCND1 may be acause of parathyroid adenomas. Translocation t(11;11)(q13;p15) withthe parathyroid hormone (PTH) enhancer. Defects in CCND1 are a cause of multiple myeloma (MM)[MIM:254500]. MM is a malignant tumor of plasma cells usuallyarising in the bone marrow and characterized by diffuse involvementof the skeletal system, hyperglobulinemia, Bence-Jones proteinuriaand anemia. Complications of multiple myeloma are bone pain,hypercalcemia, renal failure and spinal cord compression. Theaberrant antibodies that are produced lead to impaired humoralimmunity and patients have a high prevalence of infection.Amyloidosis may develop in some patients. Multiple myeloma is partof a spectrum of diseases ranging from monoclonal gammopathy ofunknown significance (MGUS) to plasma cell leukemia. Note=Achromosomal aberration involving CCND1 is found in multiplemyeloma. Translocation t(11;14)(q13;q32) with the IgH locus. **Similarity:** Belongs to the cyclin family. Cyclin D subfamily. **SWISS:** P25322 **Gene ID:** 595 **Database links:** Entrez Gene: 595 Human Entrez Gene: 12443 Mouse Entrez Gene: 58919 Rat Omim: 168461 Human

	SwissProt: P24385 Human SwissProt: P25322 Mouse SwissProt: P39948 Rat Unigene: 523852 Human Unigene: 667996 Human Unigene: 273049 Mouse Unigene: 22279 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. 细胞周期素D1蛋白(Cyclin D1)是细胞周期中的重要调控因子，它作用于细胞周期的G1→S期调控点，为G1期的限速步骤。 CyclinD1-Cyclin D1的过度表达使细胞周期G1期缩短，细胞生长对有丝分裂原和粘附信号的需求降低，最终引发Tumour的发生。该抗原的氨基酸序列抗原决定簇-结合位点，我们选在了细胞质的粗面内质网。越来越多的研究表明。CyclinD1在正常细胞周期及Tumour的调节中起着重要作用。周期素D1/Bcl-1属于细胞周期调控蛋白家族成员之一，在细胞周期从G1进入S期中起到重要作用。周期素D1的过度表达与癌症的早发、Tumour的进展和转移相关。该抗体可用于细胞周期方面的研究，

Picture:	 Sample: Mcf-7(Human) Cell Lysate at 30 ug Primary: Anti-Cyclin D1 (SL0623R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 32 kD Observed band size: 32 kD



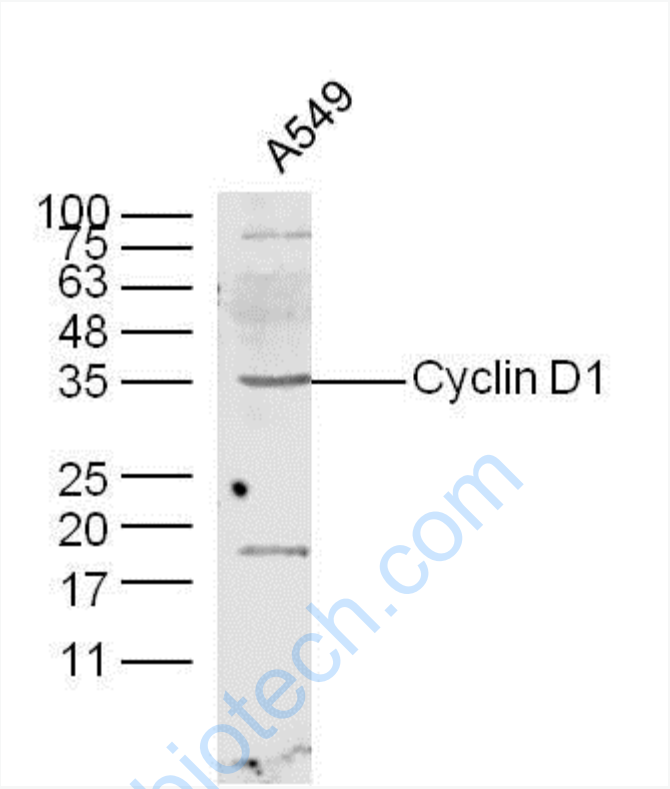
Sample: A549 Lysate at 40 ug

Primary: Anti-CyclinD1 (SL0623R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 32 kD

Observed band size: 35 kD



Sample:

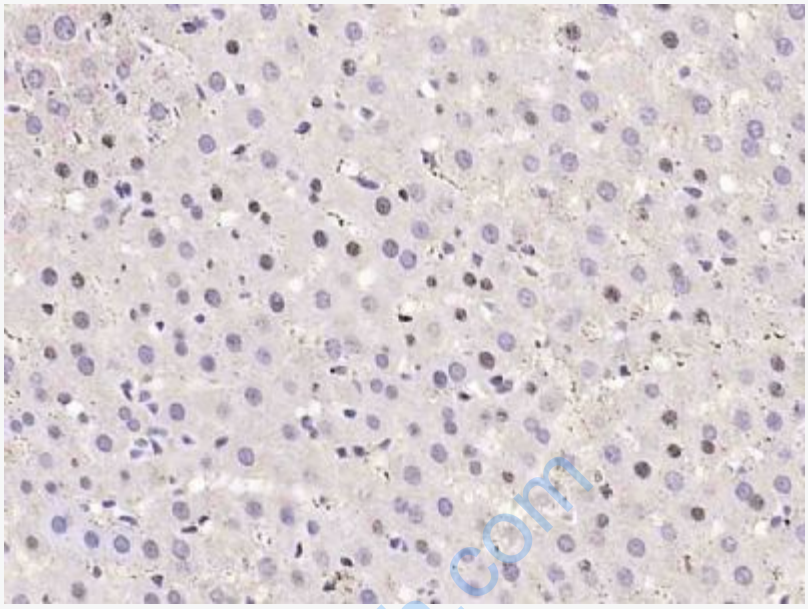
A549 Cell (Human) Lysate at 30 ug

Primary: Anti-Cyclin D1 (SL0623R) at 1/300 dilution

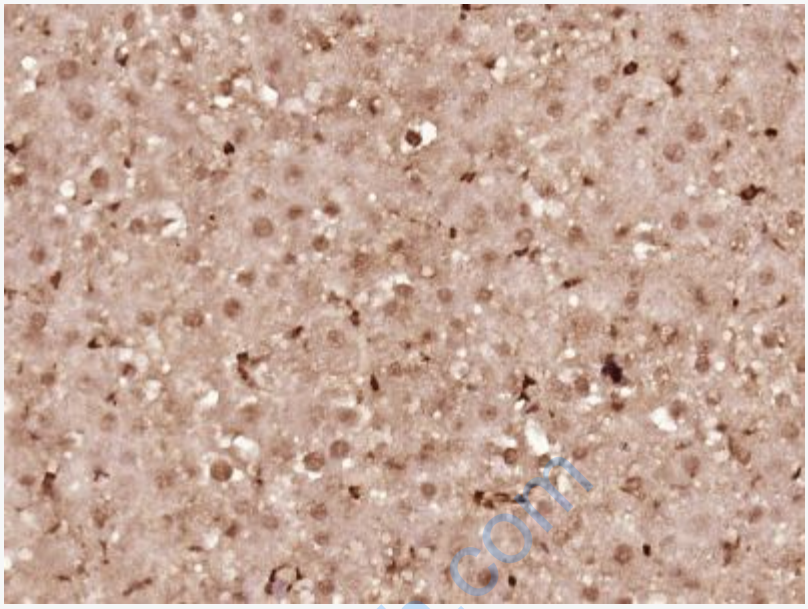
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 32 kD

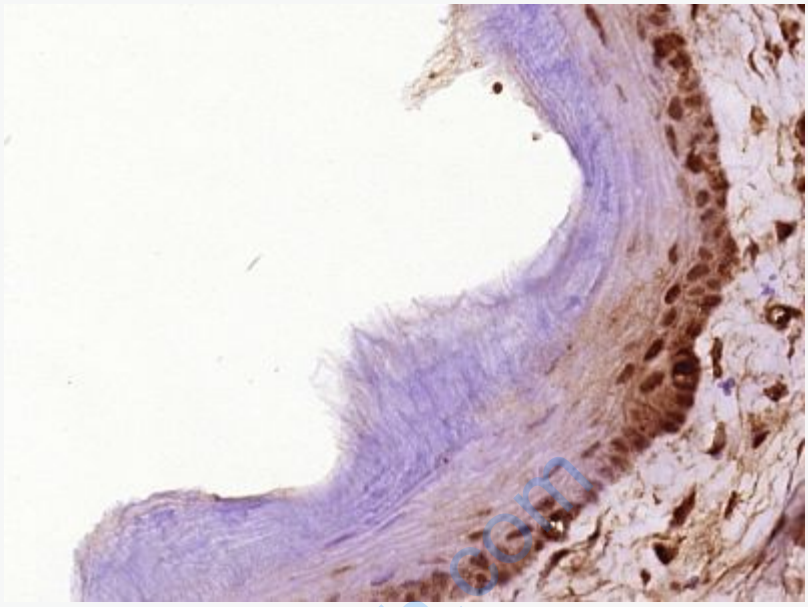
Observed band size: 35 kD



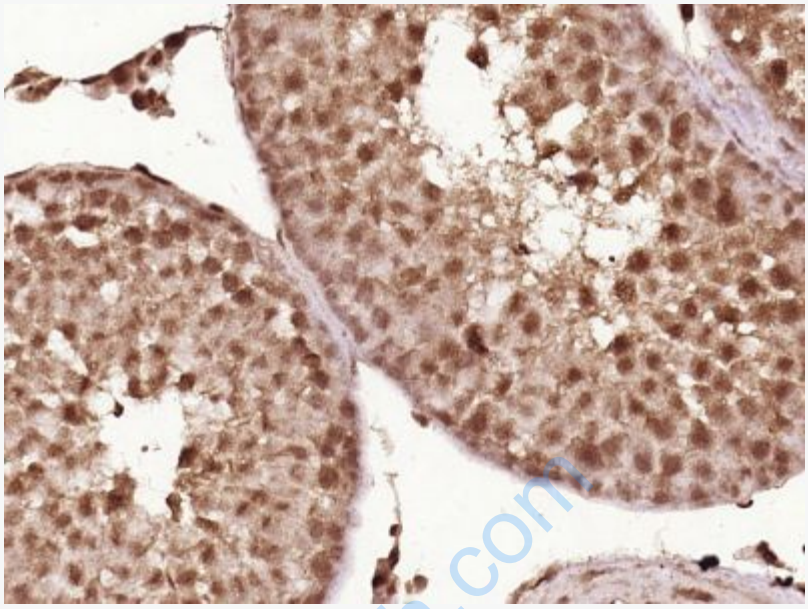
Paraformaldehyde-fixed, paraffin embedded (rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cyclin D1) Polyclonal Antibody, Unconjugated (SL0623R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



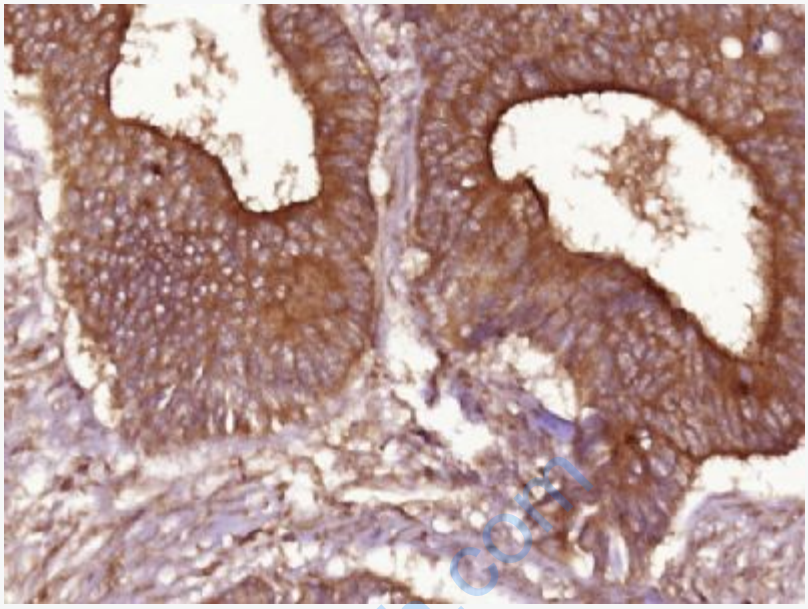
Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cyclin D1) Polyclonal Antibody, Unconjugated (SL0623R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



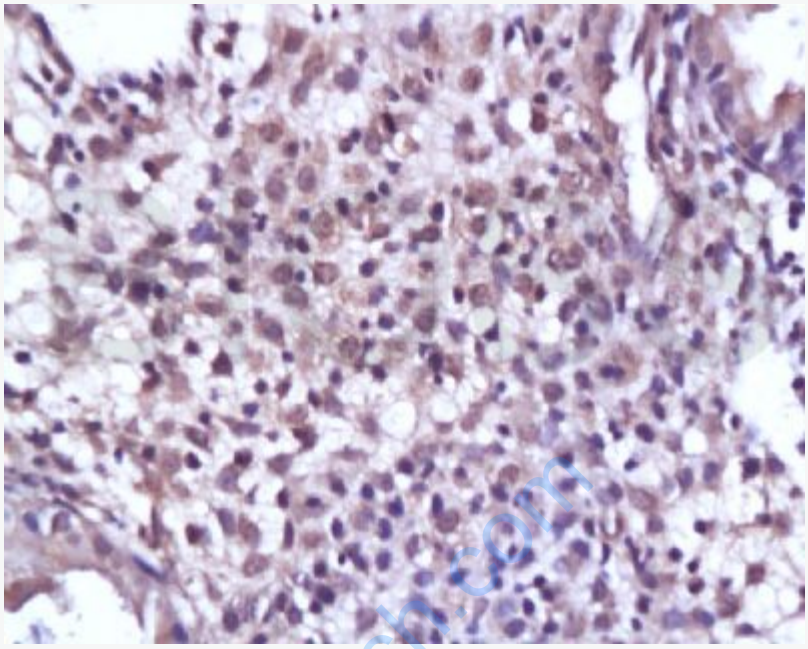
Paraformaldehyde-fixed, paraffin embedded (Rat esophageal); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cyclin D1) Polyclonal Antibody, Unconjugated (SL0623R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cyclin D1) Polyclonal Antibody, Unconjugated (SL0623R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



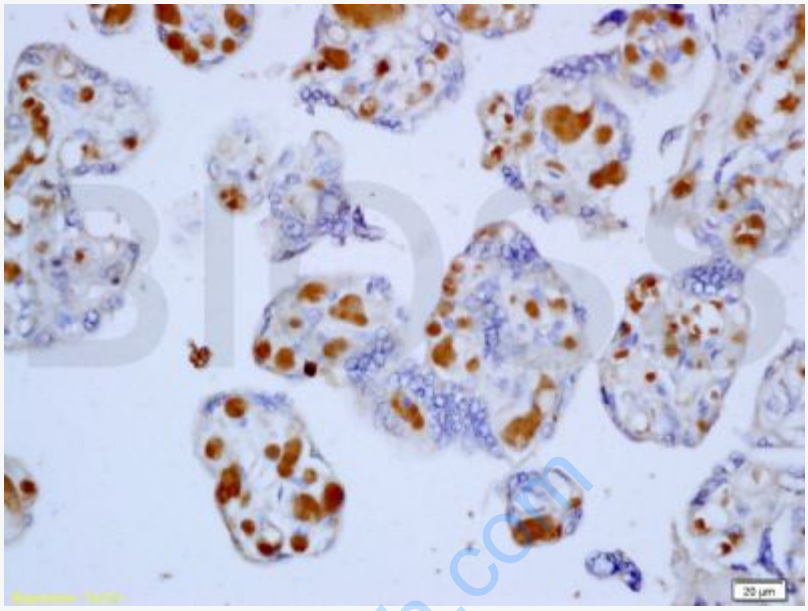
Paraformaldehyde-fixed, paraffin embedded (Human cervical cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Cyclin D1) Polyclonal Antibody, Unconjugated (SL0623R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Tissue/cell: human endometrium carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

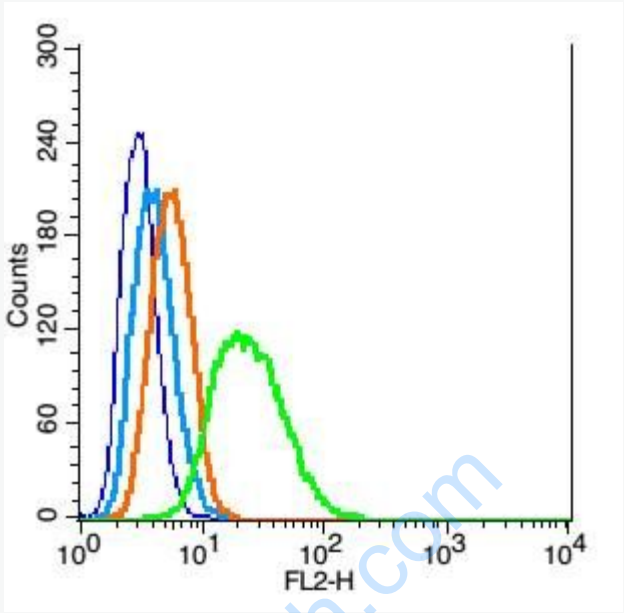
Incubation: Anti-Cyclin D1 Polyclonal Antibody, Unconjugated(SL0623R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human placenta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-Cyclin D1 Polyclonal Antibody, Unconjugated(SL0623R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice. Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 1μg in 100 μL1X PBS containing 0.5% BSA(green).