

Rabbit Anti-CDK4 [EP180]: RM0058, RM0058RTU7

Intended Use: For Research Use Only

Description: Cyclin-dependent kinase 4 (CDK4) is a member of the Ser/Thr protein kinase family. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16 (INK4a). Overexpression of CDK4 has been observed in many tumor types, including oral squamous cell carcinoma and cancers of the pancreatic (endocrine tumors), lung, breast and colon. The expression of CDK4 is associated with tumor progression. Some study showed a high expression of CDK4 (92%) in atypical lipomatous tumor/well-differentiated liposarcomas (ALT-WDLPS) and dedifferentiated liposarcomas (DDLPS) by immunostaining. CDK4 is useful in differentiating ALT-WDLPS from benign adipose tumors and to separate DDLPS from poorly differentiated sarcomas.

Specifications:

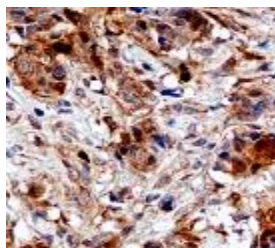
Clone: EP180
Source: Rabbit
Isotype: IgG
Reactivity: Human
Localization: Nucleus, cytoplasm
Formulation: Antibody in PBS pH7.4, containing BSA, and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC
Package:

Description	Catalog No.	Size
CDK4 Concentrated	RM0058	1 ml
CDK4 Prediluted	RM0058RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Colon, breast cancer, liposarcoma
Concentrated Dilution: 50-200
Pretreatment: EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human breast carcinoma stained with anti-CDK4 using DAB

References:

1. RNA-binding motif protein 5 inhibits the proliferation of cigarette smoke-transformed BEAS-2B cells through cell cycle arrest and apoptosis. Lv XJ, et al. Oncol Re, 2016.
2. MicroRNA-197 inhibits cell proliferation by targeting GAB2 in glioblastoma. Tian LQ, et al. Mol Med Rep, 2016.
3. SerpinE2 promotes multiple cell proliferation and drug resistance in osteosarcoma. Wang W, et al. Mol Med Rep 14:881-7, 2016.
4. NLK functions to maintain proliferation and stemness of NSCLC and is a target of metformin. Suwei D, et al. J Hematol Oncol 8:120, 2015.

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Rev. A