

**Mouse Anti-CDK4 [DCS-31]: MC0522, MC0522RTU7**

**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:**

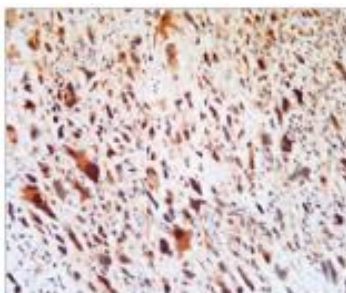
Clone: DCS-31  
 Source: Mouse  
 Isotype: IgG2a/k  
 Reactivity: Human  
 Immunogen: Full length Cdk4 of human origin  
 Localization: Nucleus, cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, ICC/IF, IP, WB  
 Package:

Description	Catalog No.	Size
CDK4 Concentrated	MC0522	1 ml
CDK4 Prediluted	MC0522RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Colon, breast cancer, colon, liposarcoma  
 Concentrated Dilution: 25-100  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 min Pressure Cooker or 30-60 min 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 pleomorphic liposarcoma stained with anti-CDK4 using DAB

**References:**

1. Successful β cells islet regeneration in streptozotocin-induced diabetic baboons using ultrasound-targeted microbubble gene therapy with cyclinD2/CDK4/GLP1. Chen S, et al. Cell Cycle. 13(7):1145-51, 2014.
2. Plexiform fibromyxoma (plexiform angiomyxoid myofibroblastic tumor) of stomach: an unusual presentation as a fistulating abscess. Lee PW1, et al. Int J Surg Pathol. May;22(3):286-90, 2014.
3. The CDKN2A/CDKN2B/CDK4/CCND1 pathway is pivotal in well-differentiated and dedifferentiated liposarcoma oncogenesis: an analysis of 104 tumors. Louis-Brennetot C, et al. Genes Chromosomes Cancer. Nov;50(11):896-907, 2011.