

Mouse Anti-p16/INK4a [2D9A12]: MC0198, MC0198RTU7

Intended Use: For Research Use Only

Description: p16/INK4A is a tumor-suppressor protein and that genetic and epigenetic abnormalities in genes controlling the G1 checkpoint can lead to both escape from senescence and cancer formation. The interaction of p16/INK4 family members can be a binary complex with CDK4/6 or ternary complex with cyclin D-bound CDK4/6 and ultimately results in the inhibition of cell cycle progression. As such, expression of p16 INK4A is commonly associated with cellular senescence, and disruption of the p16 INK4A gene is frequently observed in human tumor. The p16/INK4A locus is deleted in a wide spectrum of tumors including melanoma, pancreatic adenocarcinoma, glioblastoma, certain leukemias, non-small cell lung cancer, cervical cancer, and bladder carcinoma.

Specifications

Clone: 2D9A12
 Source: Mouse
 Isotype: IgG2b
 Reactivity: Human, rat
 Localization: Nucleus and/or cytoplasm
 Formulation: Ascites diluted in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, WB
 Package:

Description	Catalog No.	Size
p16/INK4a Concentrated	MC0198	1 ml
p16/INK4a Prediluted	MC0198RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Squamous Cell Carcinoma
 Concentrated Dilution: 25-200
 Pretreatment: Citrate pH6.0 or 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 cervix tissue stained with anti-p16 using DAB

References:

1. Expression of P16 in high-risk human papillomavirus related lesions of the uterine cervix in a government hospital, Malaysia. Krishnappa P, et al. Diagn Pathol 9:202, 2014.
2. Homeostatic maintenance of allele-specific p16 methylation in cancer cells accompanied by dynamic focal methylation and hydroxymethylation. Qin S, et al. PLoS One 9:e97785, 2014.
3. In serum veritas-in serum sanitas? Cell non-autonomous aging compromises differentiation and survival of mesenchymal stromal cells via the oxidative stress pathway. Geißler, et al. Cell Death Dis 4:e970, 2013.
4. The CDKN2A G500 Allele Is More Frequent in GBM Patients with No Defined Telomere Maintenance Mechanism Tumors and Is Associated with Poorer Survival. Royds JA, et al. PLoS One 6:e26737, 2011.
5. Abnormalities of tumor suppressor gene p16 in pancreatic carcinoma: immunohistochemical and genetic findings compared with clinicopathological parameters. Ohtsubo K, et al. J Gastroenterol. 38(7):663-71, 2003.