

**Mouse Anti-p16/INK4a [JC2]: MC0369, MC0369RTU7**

**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**

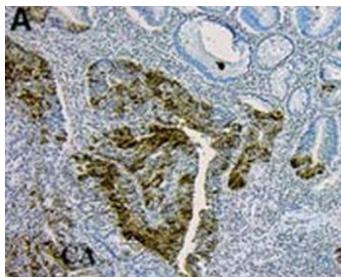
Clone: JC2 also known as 16P04  
 Source: Mouse  
 Isotype: IgG2a  
 Reactivity: Human  
 Immunogen: Purified recombinant prokaryotic full length human p16INK4 protein  
 Localization: Nucleus and/or cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
p16/INK4a Concentrated	MC0369	1 ml
p16/INK4a Prediluted	MC0369RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Squamous Cell Carcinoma  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris 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 colon adenocarcinoma stained with anti-p16 using DAB

**References:**

1. Inhibition of the 60S ribosome biogenesis GTPase LSG1 causes endoplasmic reticular disruption and cellular senescence.
2. Pantazi A, et al. Aging Cell. Aug;18(4):e12981, 2019.
3. CDKN2A copy number and p16 expression in malignant pleural mesothelioma in relation to asbestos exposure. Eeva Kettunen, et al. BMC Cancer volume 19, Article number: 507, 2019.
4. Protein and chemotherapy profiling of extracellular vesicles harvested from therapeutic induced senescent triple negative breast cancer cells. Kavanagh EL, et al. Oncogenesis. Oct 9;6(10):e388, 2017.
5. FOXM1 regulates proliferation, senescence and oxidative stress in keratinocytes and cancer cells.