

Mouse Anti-MCM2 [MCM2/3678]: MC0167, MC0167RTU7

Intended Use: For Research Use Only

Description: Minichromosome maintenance protein 2 (MCM2), also known as DNA replication licensing factor MCM2, is a member of the MCM family that regulates mammalian DNA replication. This family is composed of six related subunits, called the hexameric MCM2-7 complex, that are conserved in all eukaryotes. It functions as a replicative helicase, the molecular motor that both unwinds duplex DNA and powers fork progression during DNA replication. MCM2 acts as a factor to license DNA for one and only one round of replication per cell cycle. In the cell cycle, levels of the MCM family gradually increase in a variable manner from G0 into the G1/S phase. In the G0 stage, the amounts of MCM2 and MCM5 proteins are much lower than that of MCM7 and MCM3 proteins, so some of them participate in cell cycle regulation. MCM2 is localized in the nucleus throughout interphase. It is required for entry into the S phase and cell division. Anti-MCM2 labels proliferating cells in normal and tumor tissue. MCM2 has been used as a proliferation marker superior to Ki-67 for identification of premalignant lesions in colon, lung and other epithelial tissues. In addition, the MCM2 antibody is helpful in the distinction of malignant mesothelioma from reactive mesothelial proliferation.

Specifications:

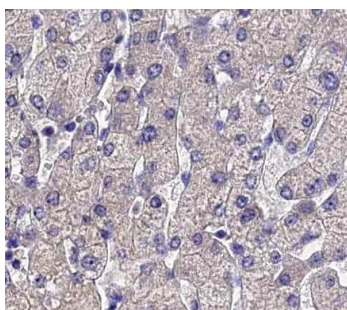
Clone:	MCM2/3678
Source:	Mouse
Isotype:	IgG1
Reactivity:	Human
Immunogen:	Recombinant fragment of human MCM2
Localization:	Nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC
Package:	

Description	Catalog No.	Size
MCM2 Concentrated	MC0167	1 ml
MCM2 Prediluted	MC0167RTU7	7 ml

IHC Procedure*:

Positive Control Tissue:	Lung cancer, colon cancer, mesothelioma
Concentrated Dilution:	50-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes 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 liver stained with anti-MCM2 using DAB

References:

1. Nuclear exclusion of SMAD2/3 in granulosa cells is associated with primordial follicle activation in the mouse ovary. Hardy, K., Mora, J. M., et al. Journal of Cell Science on 7 September 2018.
2. Evaluation of Nestin Expression in the Developing and Adult Mouse Inner Ear. Chow, C. L., et al..Stem Cells and Development on 1 October 2016.

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