

Rabbit Anti-MCM4 [MD385R]: RM0161, RM0161RTU7

Intended Use: For Research Use Only

Description: The mini-chromosome maintenance (MCM) family of proteins, including MCM2, MCM3, MCM4 (Cdc21), MCM5 (Cdc46), MCM6 (Mis5) and MCM7 (Cdc47), are regulators of DNA replication that act to ensure replication occurs only once in the cell cycle. Expression of MCM proteins increases during cell growth, peaking at G1 to S phase. The MCM proteins each contain an ATP-binding motif, which is predicted to mediate ATP-dependent opening of double-stranded DNA. MCM proteins are regulated by E2F transcription factors, which induce MCM expression, and by protein kinases, which interact with MCM proteins to maintain the postreplicative state of the cell. MCM2/MCM4 complexes function as substrates for Cdc2/cyclin B in vitro. Cleavage of MCM3, which can be prevented by caspase inhibitors, results in the inactivation of the MCM complex (composed of at least MCM proteins 2-6) during apoptosis. A complex composed of MCM4, MCM6 and MCM7 has been shown to be involved in DNA helicase activity; and MCM5 is involved in IFN- γ -induced Stat1 α transcription activation.

Specifications

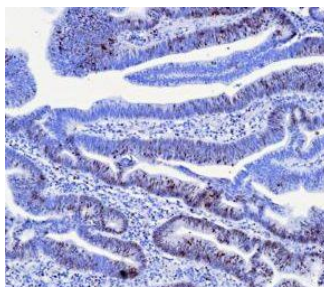
Clone:	MD385R
Source:	Rabbit
Isotype:	IgG
Reactivity:	Human
Immunogen:	Recombinant fragment aa600-800 of human MCM4 protein
Localization:	Nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, WB
Package:	

Description	Catalog No.	Size
MCM4 Concentrated	RM0161	1 ml
MCM4 Prediluted	RM0161RTU7	7 ml

IHC Procedure*

Positive Control Tissue:	Colon, tonsil
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 colon adenocarcinoma stained with anti-MCM4 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., Trivedi, P., et al..Stem Cells and Development on 1 October 2016.

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