

ARG59031 anti-MCM7 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes MCM7
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	MCM7
Species	Human
Immunogen	Recombinant protein corresponding to D526-V719 of Human MCM7.
Conjugation	Un-conjugated
Alternate Names	PNAS146; CDC47 homolog; DNA replication licensing factor MCM7; MCM2; P1.1-MCM3; EC 3.6.4.12; CDC47; P1CDC47; P85MCM; PPP1R104

Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml

Application Note IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

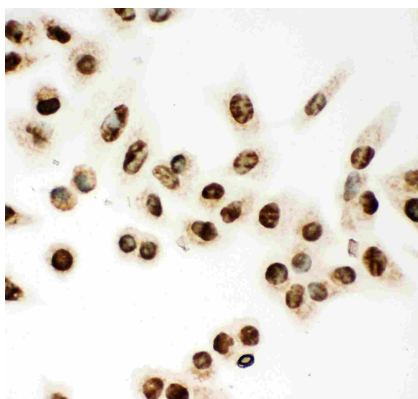
before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

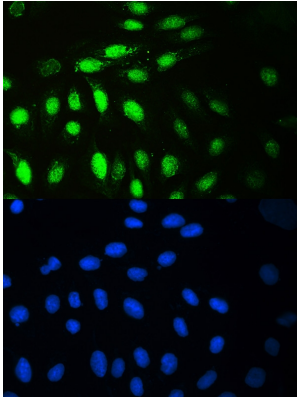
Gene Symbol	MCM7
Gene Full Name	minichromosome maintenance complex component 7
Background	The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by the MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. The MCM complex consisting of this protein and MCM2, 4 and 6 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. Cyclin D1-dependent kinase, CDK4, is found to associate with this protein, and may regulate the binding of this protein with the tumoursuppressor protein RB1/RB. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]
Function	Acts as component of the MCM2-7 complex (MCM complex) which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. The active ATPase sites in the MCM2-7 ring are formed through the interaction surfaces of two neighboring subunits such that a critical structure of a conserved arginine finger motif is provided in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity. Required for S-phase checkpoint activation upon UV-induced damage. [UniProt]
Calculated Mw	81 kDa
PTM	O-glycosylated (O-GlcNAcylated), in a cell cycle-dependent manner. [UniProt]
Cellular Localization	Nucleus. [UniProt]

Images



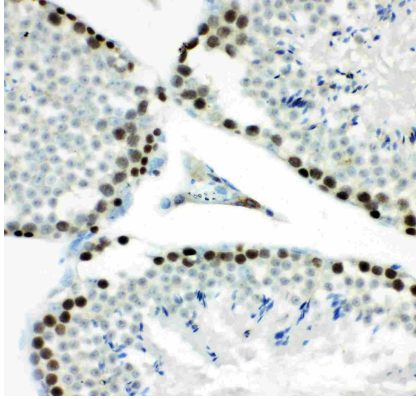
ARG59031 anti-MCM7 antibody ICC image

Immunocytochemistry: A549 cells stained with ARG59031 anti-MCM7 antibody.



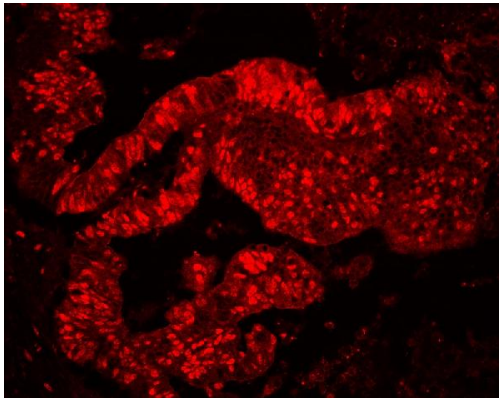
ARG59031 anti-MCM7 antibody ICC/IF image

Immunofluorescence: U2OS cells were blocked with 10% goat serum and then stained with ARG59031 anti-MCM7 antibody (green) at 2 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



ARG59031 anti-MCM7 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse testis tissue stained with ARG59031 anti-MCM7 antibody.



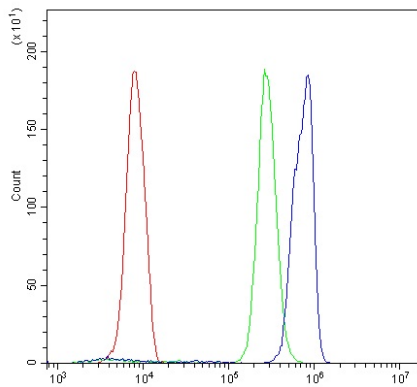
ARG59031 anti-MCM7 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59031 anti-MCM7 antibody (red) at 2 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



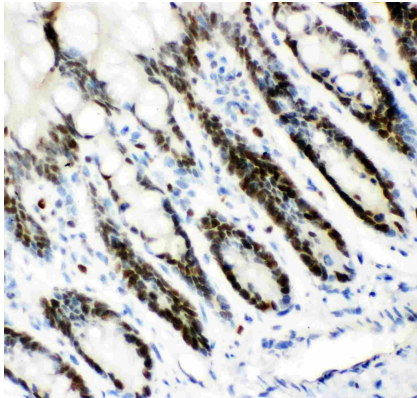
ARG59031 anti-MCM7 antibody WB image

Western blot: 0.5 ng of Recombinant Human MCM7 Protein stained with ARG59031 anti-MCM7 antibody at 0.5 $\mu\text{g}/\text{ml}$.



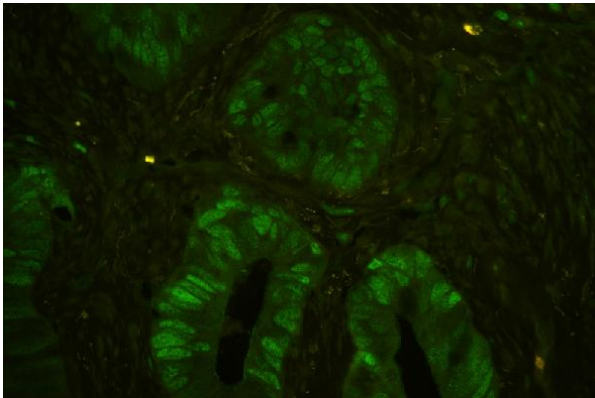
ARG59031 anti-MCM7 antibody FACS image

Flow Cytometry: U937 cells were blocked with 10% normal goat serum and then stained with ARG59031 anti-MCM7 antibody (blue) at 1 µg/10⁶ cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 µg/10⁶ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



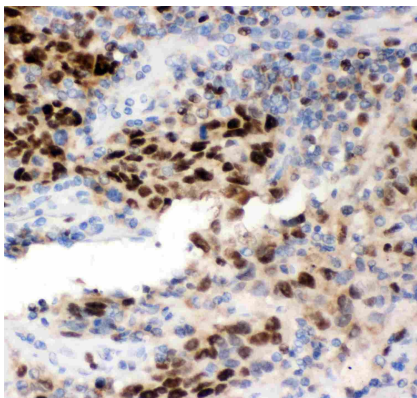
ARG59031 anti-MCM7 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat intestine tissue stained with ARG59031 anti-MCM7 antibody.



ARG59031 anti-MCM7 antibody IHC-P image

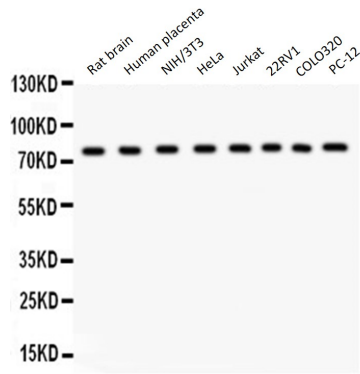
Immunohistochemistry: Paraffin-embedded Human colon cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59031 anti-MCM7 antibody (green) at 2 µg/ml dilution, overnight at 4°C.



ARG59031 anti-MCM7 antibody IHC-P image

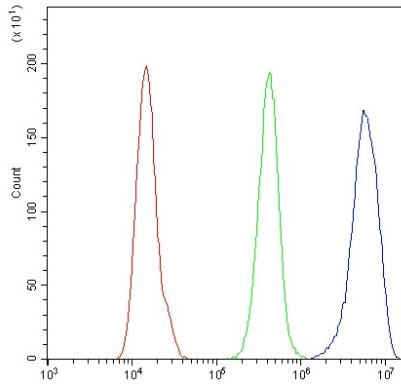
Immunohistochemistry: Paraffin-embedded Human lung cancer tissue stained with ARG59031 anti-MCM7 antibody.

ARG59031 anti-MCM7 antibody WB image



Western blot: 50 μ g of Rat brain, 50 μ g of Human placenta, 40 μ g of NIH/3T3, 40 μ g of HeLa, 40 μ g of Jurkat, 40 μ g of 22RV1, 40 μ g of COLO320 and 40 μ g of PC-12 lysates stained with ARG59031 anti-MCM7 antibody at 0.5 μ g/ml dilution.

ARG59031 anti-MCM7 antibody FACS image



Flow Cytometry: A431 cells were blocked with 10% normal goat serum and then stained with ARG59031 anti-MCM7 antibody (blue) at 1 μ g/ 10^6 cells for 30 min at 20°C, followed by incubation with DyLight[®]488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1 μ g/ 10^6 cells) used under the same conditions. Unlabelled sample (red) was also used as a control.