### For Research Use Only

# MCM2 Polyclonal antibody

Catalog Number: 10513-1-AP

Featured Product

45 Publications

BC007670

4171

GeneID (NCBI):

GenBank Accession Number:



**Basic Information** 

Catalog Number: 10513-1-AP Concentration: 500 ug/ml

Source: UNIPROT ID: Rabbit P49736
Isotype: Full Name:

IgG minichromosome maintenance
Immunogen Catalog Number: complex component 2

AG0798 Calculated MW:

102 kDa

Observed MW: 116-125 kDa Purification Method:

Antigen affinity purification

Recommended Dilutions: WB: 1:1000-1:8000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC: 1:1000-1:4000 IF-P: 1:50-1:500 IF/ICC: 1:50-1:500

FC (Intra): 0.20 ug per 10^6 cells in a

100 µl suspension

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

Cited Applications: WB, IHC, IF, IP, RIP Species Specificity: human, mouse Cited Species: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

WB: HCT 116 cells, HEK-293 cells, HeLa cells, K-562

cells

IP: HEK-293 cells,

IHC: human tonsillitis tissue, human cervical cancer

tissue

IF-P: human gliomas tissue,

IF/ICC : HeLa cells,
FC (Intra) : NIH/3T3 cells,

## **Background Information**

The MCM2-7 complex forms the core of the replicative helicase which acts as the molecular motor that uses ATP binding and hydrolysis to fuel the unwinding of double-stranded DNA at the replication fork in eukaryotes. This complex is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. MCM2, also named CDCL1 and BM28, is a human nuclear protein that plays an important role in 2 crucial steps of the cell cycle, namely, onset of DNA replication and cell division.

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Irina Vazquez-Villasenor	34536321	Eur J Neurosci	IF
Chun Pan	36115647	Toxicology	IHC
Hana Polasek-Sedlackova	36241664	Nat Commun	IF

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

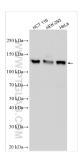
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

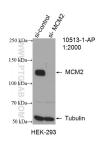
W: ptgcn.cor

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

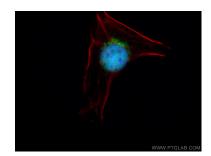
### Selected Validation Data



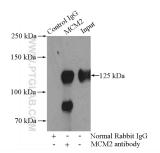
Various lysates were subjected to SDS PAGE followed by western blot with 10513-1-AP (MCM2 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



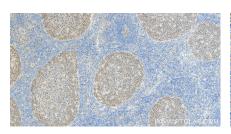
WB result of MCM2 antibody (10513-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MCM2 transfected HEK-293 cells.



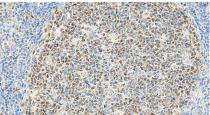
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MCM2 antibody (10513-1-AP) at dilution of 1:200 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



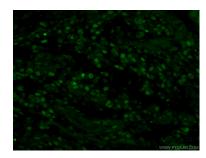
IP result of anti-MCM2 (IP:10513-1-AP, 4ug; Detection:10513-1-AP 1:800) with HEK-293 cells lysate 2800ug.



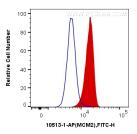
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 10513-1-AP (MCM2 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 10513-1-AP (MCM2 antibody) at dilution of 1:2000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human gliomas tissue using 10513-1-AP (MCM2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 NIH/3T3 cells were intracellularly stained with 0.2 ug Anti-Human MCM2 (10513-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).