### For Research Use Only

# MCM7 Polyclonal antibody

Catalog Number: 11225-1-AP 28 Publications



### **Basic Information**

Catalog Number: 11225-1-AP Source: Rabbit

Isotype:

IgG Immunogen Catalog Number:

AG1730

Full Name: minichromosome maintenance

complex component 7

GenBank Accession Number:

BC013375

4176

P33993

GeneID (NCBI):

**UNIPROT ID:** 

Calculated MW: 81 kDa Observed MW: 81 kDa Purification Method:

Antigen affinity purification
Recommended Dilutions:

WB: 1:5000-1:50000

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

protein lysate IHC: 1:200-1:800 IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10^6 cells in a

100 µl suspension

## **Applications**

**Tested Applications:** 

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

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

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: HeLa cells, MCF-7 cells, NIH/3T3 cells, Jurkat

cells, K-562 cells

IP: NIH/3T3 cells.

IHC: human lung squamous cell carcinoma tissue, human lung cancer tissue, human lymphoma tissue

IF/ICC : A431 cells,
FC (Intra) : HepG2 cells,

## **Background Information**

MCM7, also named as CDC47 homolog or P1.1-MCM3, is a 719 amino acid protein, which belongs to the MCM family. MCM7 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 MCM2-7 complex participates in the pre-replication complex formation and exhibits helicase activity which makes DNA unwind, and resulting in recruitment of DNA polymerases and initiation of DNA replication and elongation [PMID: 29463213]. An immunohistochemical study has shown that MCM7 is increased in HCC. Silencing of MCM7 with shRNA inhibits the malignant behavior of HCC cells via cell cycle arrest and apoptosis [[PMID: 29463213].

### **Notable Publications**

Author	Pubmed ID	Journal	Application
Liangliang Cao	36133906	Front Mol Biosci	WB
Yi Zhu	30365225	Proteomics Clin Appl	IHC
Qing-Liang Wen	31949617	Int J Clin Exp Pathol	IHC

## Storage

Storage:

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

Storage Buffe

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

Aliquoting is unnecessary for -20°C storage

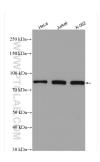
For technical support and original validation data for this product please contact:

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

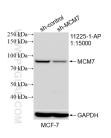
W: ptgcn.coi

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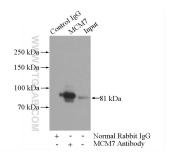
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 11225-1-AP (MCM7 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



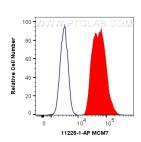
WB result of MCM7 antibody (11225-1-AP; 1:15000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MCM7 transfected MCF-7 cells.



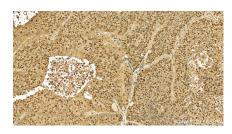
IP result of anti-MCM7 (IP:11225-1-AP, 4ug; Detection:11225-1-AP 1:2000) with NIH/3T3 cells lysate 1600ug.



Immunofluorescent analysis of (4% PFA) fixed A431 cells using MCM7 antibody (11225-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human MCM7 (11225-1-AP) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffinembedded human lung squamous cell carcinoma tissue slide using 11225-1-AP (MCM7 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).