

For Research Use Only

MCM7 Polyclonal antibody

Catalog Number: 11225-1-AP

23 Publications



Basic Information

Catalog Number:

11225-1-AP

Size:

150ul, Concentration: 650 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1730

GenBank Accession Number:

BC013375

GeneID (NCBI):

4176

UNIPROT ID:

P33993

Full Name:

minichromosome maintenance complex component 7

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 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, 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 Buffer:

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

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

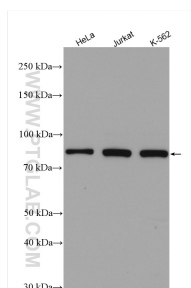
For technical support and original validation data for this product please contact:

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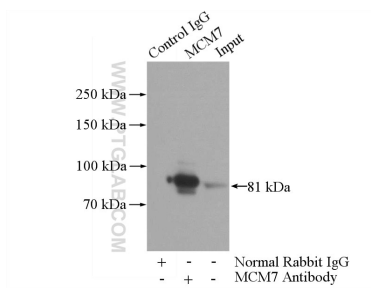
E: proteintech@ptglab.com
W: ptglab.com

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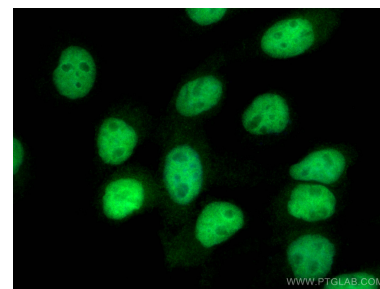
Selected Validation Data



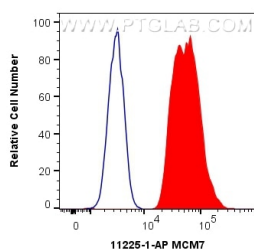
Various lysates were subjected to SDS PAGE followed by western blot with 11225-1-AP (MCM7 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



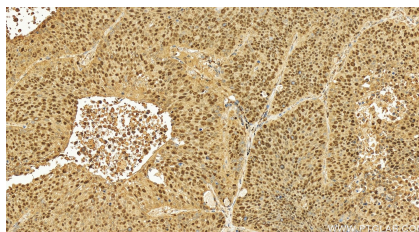
IP result of anti-MCM7 (IP:11225-1-AP, 4ug; Detection:11225-1-AP 1:2000) with NIH/3T3 cells lysate 1600ug.



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).



1X10⁶ 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 paraffin-embedded 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).