

Anti-MCM2 (phospho S53) antibody [EP4120] ab109133

重组 RabMAb

★★★★★ 4 Abreviews 9 References 10 图像

概述

产品名称	Anti-MCM2 (phospho S53)抗体[EP4120]
描述	兔单克隆抗体[EP4120] to MCM2 (phospho S53)
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), WB, IHC-P, ICC/IF 不适用于: Flow Cyt or IP
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa whole cell lysate (ab150035). IHC-P:Human tonsil tissue. ICC/IF: HeLa cells.
常规说明	<p>This product has switched from a hybridoma to recombinant production method on 9th June 2023.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 0.05% BSA, 40% Glycerol (glycerin, glycerine), 59% PBS
纯度	Protein A purified
克隆	单克隆
克隆编号	EP4120
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab109133于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

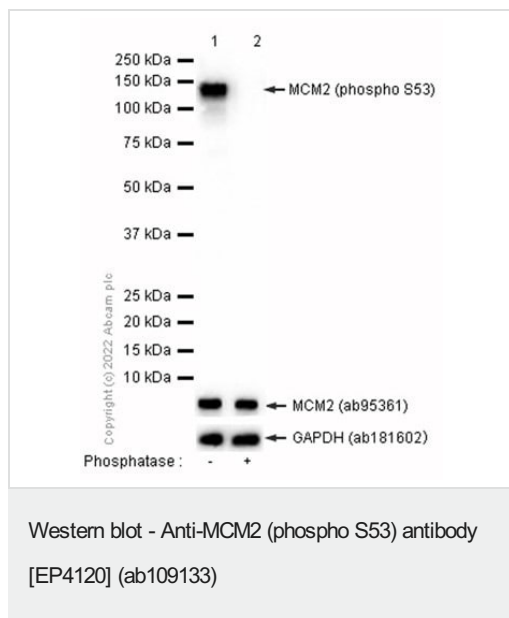
应用	Ab评论	说明
Flow Cyt (Intra)		1/20.
WB	★★★★★ (1)	1/1000.
IHC-P	★★★★★ (2)	1/2400. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/50.

应用说明 Is unsuitable for Flow Cyt or IP.

靶标

功能	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 the entry in S phase and for cell division.
序列相似性	Belongs to the MCM family. Contains 1 MCM domain.
翻译后修饰	Phosphorylated on Ser-108 by ATR in proliferating cells. Ser-108 proliferation is increased by genotoxic agents. Ser-40 is mediated by the CDC7-DBF4 and CDC7-DBF4B complexes, while Ser-53 phosphorylation is only mediated by the CDC7-DBF4 complex. Phosphorylation by the CDC7-DBF4 complex during G1/S phase is required for the initiation of DNA replication.
细胞定位	Nucleus.

图片



All lanes : Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133) at 1/10000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate at 15 µg

Lane 2 : HeLa whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

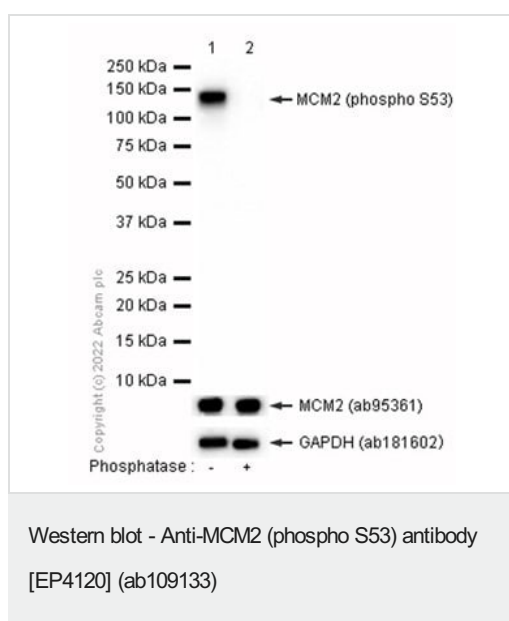
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Observed band size: 130 kDa

Exposure time: 10 seconds

Blocking and diluting buffer and concentration: 5% NFDm/TBST.



All lanes : Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133) at 1/10000 dilution

Lane 1 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate at 15 µg

Lane 2 : NIH/3T3 whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

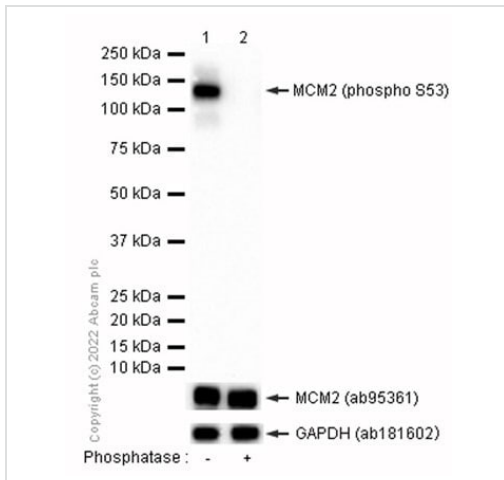
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Observed band size: 130 kDa

Exposure time: 10 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



Western blot - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

All lanes : Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133) at 1/10000 dilution

Lane 1 : C6 (Rat glial tumor glial cell) whole cell lysate at 15 µg

Lane 2 : C6 whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

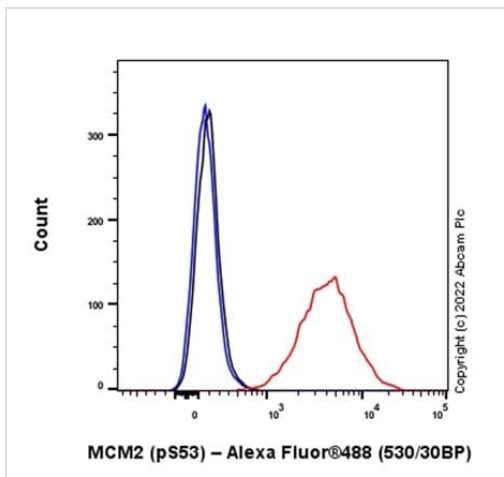
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Observed band size: 130 kDa

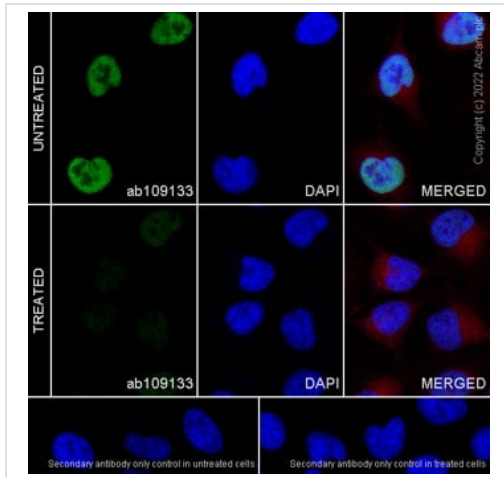
Exposure time: 60 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.



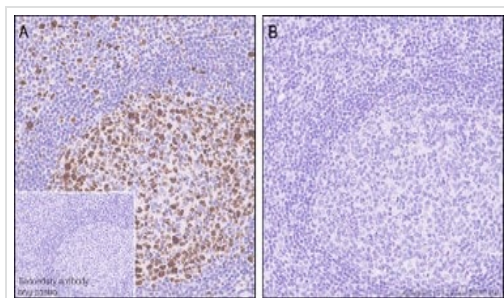
Flow Cytometry (Intracellular) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HeLa cells labelling MCM2 with ab109133 at 1/50 dilution (Red) compared with an isotype control (Black) and an unlabelled control (Cell without incubation with primary antibody and secondary antibody (Blue)). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, [ab150081](#)) was used as the secondary antibody.



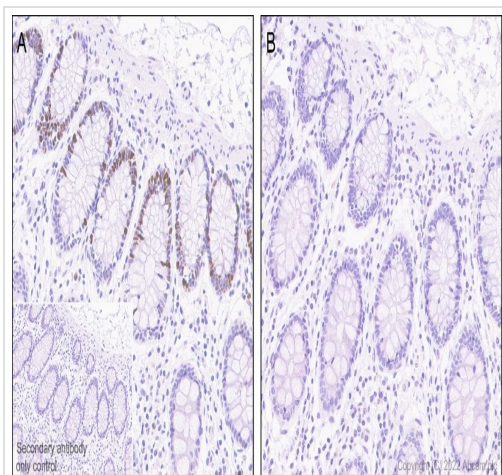
Immunocytochemistry/ Immunofluorescence - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HeLa cells labelling MCM2 with ab109133 at 1/50 dilution. Confocal image showing cytoplasmic and membranous staining in subsets of HeLa cells. [ab195889](#) AlexaFluor® 594-conjugated Anti-alpha Tubulin was used to counterstain tubulin at 1/200 dilution. The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

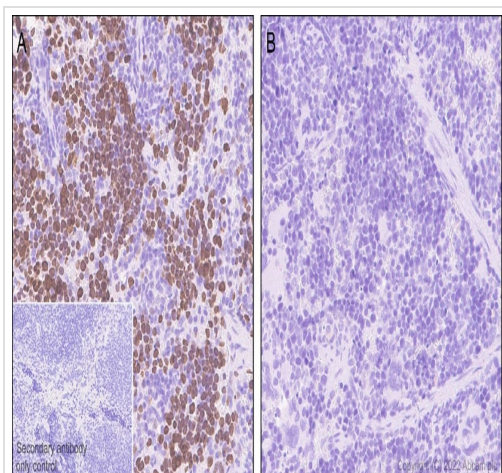
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labelling MCM2 with ab109133 at 1/2400 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Human tonsil tissue without alkaline phosphatase treatment (A) compared to no signal detected when treated with alkaline phosphatase (B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval Solution2) for 30 mins. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labelling MCM2 with ab109133 at 1/2400 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Human colon tissue without alkaline phosphatase treatment (A) compared to no signal detected when treated with alkaline phosphatase (B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

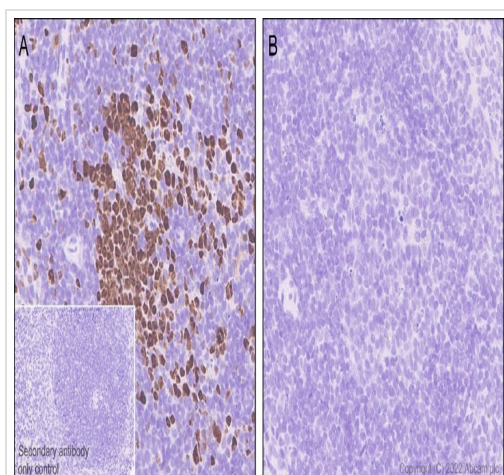
Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval Solution2) for 30 mins. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labelling MCM2 with ab109133 at 1/2400 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Mouse spleen tissue without alkaline phosphatase treatment (A) compared to no signal detected when treated with alkaline phosphatase (B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval Solution2) for 30 mins. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Immunohistochemical analysis of paraffin-embedded Rat spleen tissue labelling MCM2 with ab109133 at 1/2400 dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Positive staining on Rat spleen tissue without alkaline phosphatase treatment (A) compared to no signal detected when treated with alkaline phosphatase (B). The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, epitope retrieval Solution2) for 30 mins. Counterstained with hematoxylin.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-MCM2 (phospho S53) antibody [EP4120] (ab109133)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors