


### Anti-MCM2 antibody ab4461

★★★★★ [18 Abreviews](#) [57 References](#) [画像数 4](#)

#### 製品の概要

製品名	Anti-MCM2 antibody
製品の詳細	Rabbit polyclonal to MCM2
由来種	Rabbit
アプリケーション	<b>適用あり:</b> IHC-P, IP, WB
種交差性	<b>交差種:</b> Mouse, Human <b>交差が予測される動物種:</b> Chimpanzee, Gorilla, Orangutan 
免疫原	Synthetic peptide corresponding to Human MCM2. The epitope recognized maps to a region between residues 1 and 50 of human human minichromosomal maintenance deficient 2 using the numbering given in entry NP_0045117.2 (GeneID 4171). Database link: <a href="#">P49736</a>
特記事項	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	pH: 7 Preservative: 0.1% Sodium azide Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

#### アプリケーション

## The Abpromise guarantee

**Abpromise保証は、次のテスト済みアプリケーションにおけるab4461の使用に適用されます**

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/2000 - 1/10000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP	★★★★★ (2)	Use at 2-5 µg/mg of lysate.
WB	★★★★★ (14)	1/1000 - 1/10000. Predicted molecular weight: 100 kDa.

## ターゲット情報

### 機能

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.

### 配列類似性

Belongs to the MCM family.  
Contains 1 MCM domain.

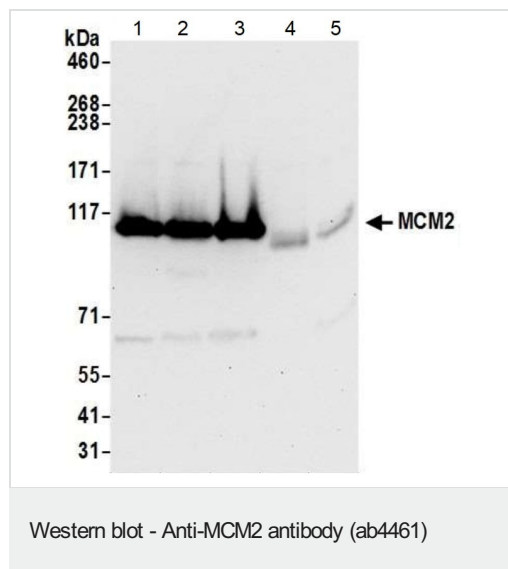
### 翻訳後修飾

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.

### 細胞内局在

Nucleus.

## 画像



**All lanes :** Anti-MCM2 antibody (ab4461) at 0.1 µg/ml

**Lane 1 :** HeLa (Human epithelial adenocarcinoma cell line) whole cell lysate

**Lane 2 :** HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate

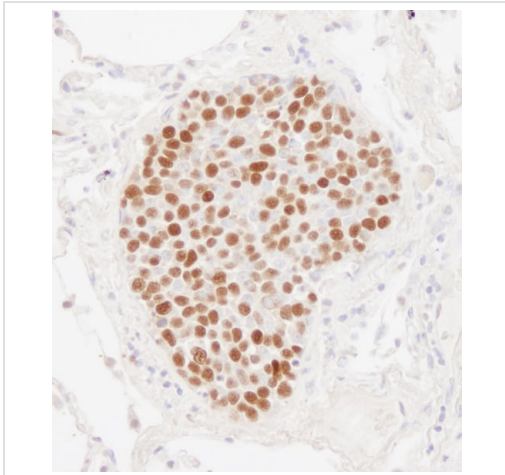
**Lane 3 :** Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

**Lane 4 :** TCMK-1 (Mouse kidney epithelial cell line) whole cell lysate

**Lane 5 :** NIH/3T3 (Mouse embryo fibroblast cell line) whole cell lysate

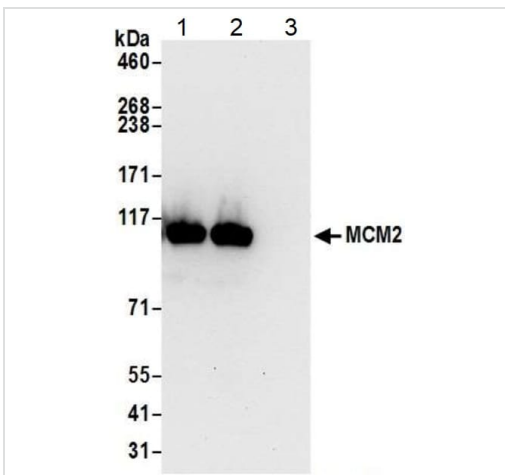
Lysates/proteins at 50 µg per lane.

**Predicted band size:** 100 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody (ab4461)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human small cell lung cancer tissue labeling MCM2 with ab4461 at 1/1000 (1 µg/ml). Detection: DAB.



Immunoprecipitation - Anti-MCM2 antibody (ab4461)

MCM2 was immunoprecipitated from 1 mg per reaction of HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate with ab4461 at 3 µg per reaction. Western blot was performed from the immunoprecipitate using ab4461 at 1 µg/ml.

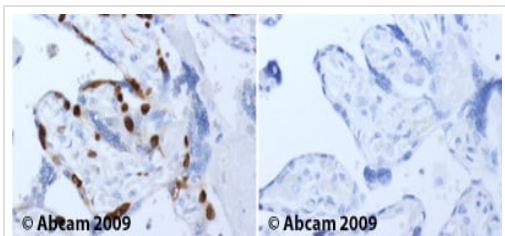
Lane 1: Phospho MCM2 (S108) antibody IP in HEK-293T lysate.

Lane 2: ab4461 IP in HEK-293T lysate.

Lane 3: Control IgG instead of ab4461 in HEK-293T lysate.

NETN lysis buffer.

Exposure time: XXXX.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody (ab4461)

Ab4461 staining MCM2 in Human placenta.

Left panel: with primary antibody at 4 µg/ml. Right panel: isotype control.

Sections were stained using an automated system (DAKO Autostainer Plus), at room temperature: sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffers EDTA pH 9.0. Slides were peroxidase blocked in 3% H<sub>2</sub>O<sub>2</sub> in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were

counterstained with Haematoxylin and coverslipped under DePeX.  
Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

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

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