# abcam

### Product datasheet

# Anti-MCM2 (phospho S40 + S41) antibody ab70371

3 References 3 图像

概述

产品名称 Anti-MCM2 (phospho S40 + S41)抗体

描述 兔多克隆抗体to MCM2 (phospho S40 + S41)

**宿主** Rabbit

经测试应用 适用于: IHC-P, WB, Flow Cyt (Intra)

种属反应性 与反应: Human

预测可用于: Mouse, Rat, Rabbit, Horse, Guinea pig, Cow, Dog, Pig, Xenopus laevis, Chimpanzee, Rhesus monkey, Gorilla, Orangutan, Xenopus tropicalis, Platypus

免疫原 Synthetic peptide corresponding to Human MCM2 (phospho S40 + S41).

阳性对照 Whole cell lysate from asynchronous 293T cells

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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.

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&As

性能

常规说明

形式 Liquid

**存放说明** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**存储溶液** pH: 6.8

Preservative: 0.09% Sodium azide

Constituents: 0.1% BSA, Tris buffered saline

纯**度** Immunogen affinity purified

应用

#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab70371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
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/1000 - 1/5000. Detects a band of approximately 117 kDa (predicted molecular weight: 100 kDa).
Flow Cyt (Intra)		Use 0.1µg for 10 <sup>6</sup> cells.  0.1 µg per 1 X 106 cells in a 150 µl volume.  ab171870 - Rabbit polyclonal lgG, is suitable for use as an isotype control with this antibody.

#### 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.

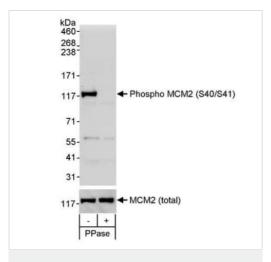
#### 翻译后修饰

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



Western blot - Anti-MCM2 (phospho S40 + S41) antibody (ab70371)

**All lanes :** Anti-MCM2 (phospho S40 + S41) antibody (ab70371) at 0.1 μg/ml

Lane 1: Whole cell lysate from asynchronous 293T cells

**Lane 2 :** Whole cell lysate from asynchronous 293T cells treated with a phosphatase

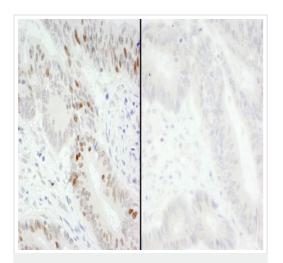
Lysates/proteins at 50 µg per lane.

**Predicted band size:** 100 kDa **Observed band size:** 117 kDa

Additional bands at: 60 kDa. We are unsure as to the identity of

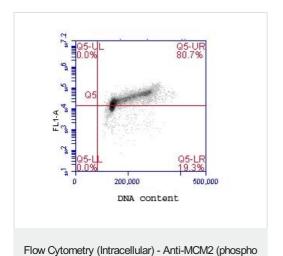
these extra bands.

The bottom panel shows total MCM2 staining; the blot was stripped and then blotted with rabbit anti-total MCM2 antibody at 0.1  $\mu$ g/ml. Detection: Chemiluminescence with exposure times of 30 seconds for upper and lower panel.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MCM2 (phospho S40 + S41) antibody (ab70371)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon carcinoma mock phosphatase treated section (left) and calf intestinal phosphatase-treated section (right) tissues labelling MCM2 (phospho S40 + S41) with ab70371 at 1/200 ( $1\mu g/ml$ ). Detection: DAB.



S40 + S41) antibody (ab70371)

ab70371 at  $0.1\mu g/ml$  staining MCM2 (phospho S40 + S41) by Flow Cytometery.  $1x10^6$  jurkat cells were fixed in 1.5% PFA and permeabilized in 90% MeOH. DNA content was simultaneously analyzed via PI stain.

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