abcam

Product datasheet

Anti-MCM7 antibody [47DC141] ab2360

★★★★★ 6 Abreviews　21 References　画像数 8

製品の概要

製品名	Anti-MCM7 antibody [47DC141]
製品の詳細	Mouse monoclonal [47DC141] to MCM7
由来種	Mouse
アプリケーション	**適用あり:** IHC-P, IP, WB, Flow Cyt, ICC/IF
種交差性	**交差種:** Mouse, Rat, Dog, Human, Xenopus laevis
免疫原	Recombinant full length protein (Human).
ポジティブ・コントロール	Breast carcinoma, MAD109 cell lysate, PC12 cell lysate.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	Preservative: 0.05% Sodium Azide Constituents: 1% BSA
精製度	IgG fraction
ポリ/モノ	モノクローナル
クローン名	47DC141
ミエローマ	unknown
アイソタイプ	IgG1
軽鎖の種類	unknown

アプリケーション

Our Abpromise guarantee covers the use of **ab2360** in the following tested applications.

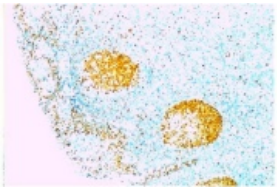
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
IHC-P	★★★★★	1/50 - 1/100. This is when using an ABC method for 30 minutes at room temperature. Sections require high temperature antigen unmasking with 10 mM citrate buffer, pH 6.0 prior to immunostaining.
IP		Use at 2 µg/mg of lysate.
WB	★★★★★	1/25 - 1/50. Detects a band of approximately 80 kDa (predicted molecular weight: 80 kDa). Incubate for 2 hrs at RT for colorimetric detection, can dilute more with ECL+ and with overnight incubation. By Western blot, this antibody detects a band of 80 kDa, which corresponds to the predicted molecular weight of Cdc47 / MCM7.
Flow Cyt		1/20. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF		Use a concentration of 1 µg/ml.

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 S-phase checkpoint activation upon UV-induced damage.
配列類似性	Belongs to the MCM family. Contains 1 MCM domain.
翻訳後修飾	Phosphorylated upon DNA damage, probably by ATM or ATR.
細胞内局在	Nucleus.

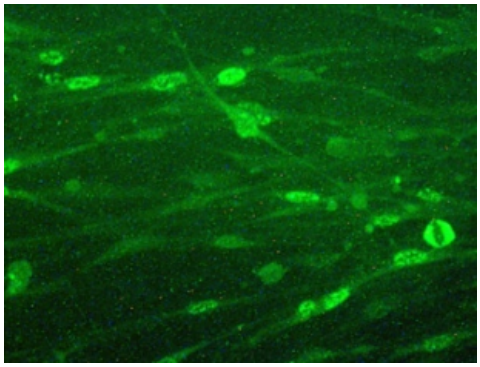
画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM7 antibody [47DC141] (ab2360)

ab2360 - immunohistochemistry

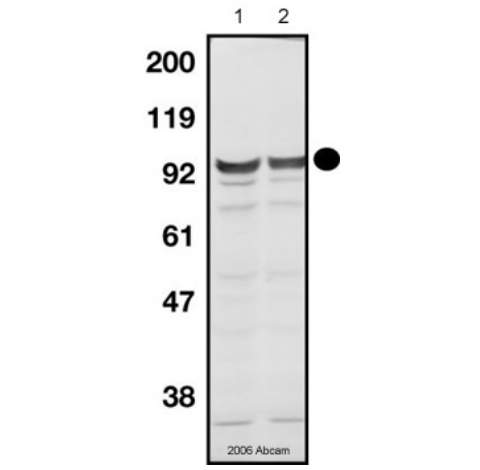
Formalin fixed paraffin embedded human tonsil stained with MCM7, using ABC and DAB chromagen.



Immunocytochemistry/ Immunofluorescence - Anti-MCM7 antibody [47DC141] (ab2360)

This image shows immunostaining of rat brain endothelial cells. Brain endothelial cells were co-cultured with neuronal precursor cells and the nuclear staining represents cells in cell cycle. Primary antibody (ab2360) was used at 1:50 dilution, incubated overnight at 4 ^{o}C. Secondary antibody - Alexafluor (488 nm) at 1:200 dilution, incubated for 2 hours at room temperature.

The picture was kindly supplied by Dr Joseph Corteza Lim and Dr Margery Barrand from University of Cambridge, Department of Pharmacology.



Western blot - Anti-MCM7 antibody [47DC141] (ab2360)

This image is courtesy of an anonymous Abreview

All lanes : Anti-MCM7 antibody [47DC141] (ab2360) at 1/200 dilution

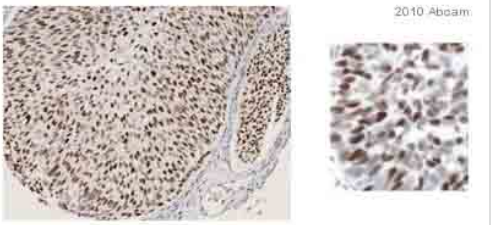
Lane 1 : M phase Xenopus laevis egg extract, whole tissue lysate.
Lane 2 : I phase Xenopus laevis egg extract, whole tissue lysate.

Secondary
All lanes : HRP conjugated Donkey anti-rabbit IgG

Developed using the ECL technique.

Predicted band size: 80 kDa
Observed band size: 95 kDa

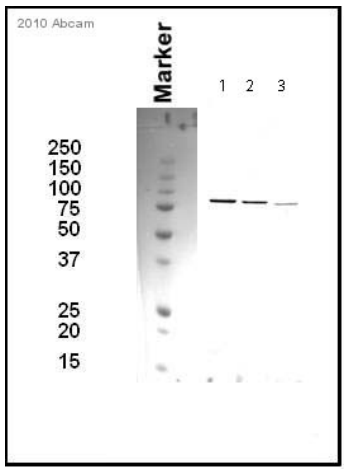
Exposure time: 1 minute



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM7 antibody [47DC141] (ab2360)

Image kindly supplied by Dr Karin Birkenkamp-Demtroeder through Abreview

ab2360 staining MCM7 in human bladder cancer tissue sections by Immunohistochemistry (formalin fixed sections). Tissue was fixed with formaldehyde and a heat mediated antigen retrieval step was performed using citrate buffer. Tissue was blocked with 5% BSA for 1 hour at room temperature followed by incubation with the primary antibody at a 1/1200 dilution for 1 hour. A HRP-conjugated goat anti-mouse polyclonal was used as secondary antibody un-diluted.



Western blot - Anti-MCM7 antibody [47DC141] (ab2360)

Image kindly supplied by Dr Karin Birkenkamp-Demtroeder through Abreview

Lane 1 : Anti-MCM7 antibody [47DC141] (ab2360) at 1/50 dilution
Lane 2 : Anti-MCM7 antibody [47DC141] (ab2360) at 1/200 dilution
Lane 3 : Anti-MCM7 antibody [47DC141] (ab2360) at 1/500 dilution

All lanes : Whole cell lysate prepared from SW780 cells

Lysates/proteins at 25 µg per lane.

Secondary
All lanes : Goat anti-mouse IgG conjugated to HRP at 1/5000 dilution

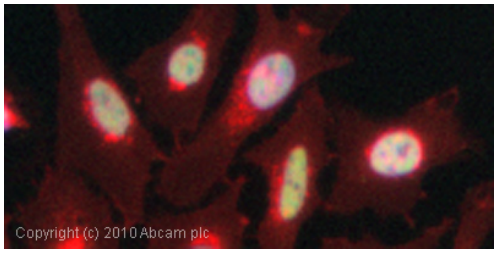
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 80 kDa
Observed band size: 81 kDa

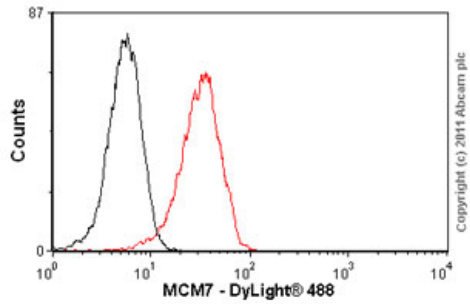
Exposure time: 10 minutes

Gel run under denaturing conditions 4-12% gradient.



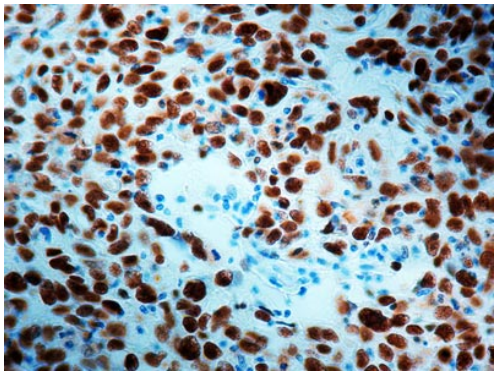
Immunocytochemistry/ Immunofluorescence - Anti-MCM7 antibody [47DC141] (ab2360)

ICC/IF image of ab2360 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab2360, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Flow Cytometry - Anti-MCM7 antibody [47DC141] (ab2360)

Overlay histogram showing HeLA cells stained with ab2360 (red line). The cells were fixed with 100% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab2360, 1/20 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM7 antibody [47DC141] (ab2360)

ab2360 staining MCM7 in formalin-fixed, paraffin-embedded Human breast carcinoma tissue tissue by Immunohistochemistry.

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