abcam

Product datasheet

Alexa Fluor® 488 Anti-MCM2 antibody [EPR4120] ab223402

יעלאעבע RabMAb

画像数3

製品名 Alexa Fluor® 488 Anti-MCM2 antibody [EPR4120]

製品の詳細 Alexa Fluor® 488 Rabbit monoclonal [EPR4120] to MCM2

Rabbit

Alexa Fluor® 488. Ex: 495nm, Em: 519nm

適用あり: Flow Cyt (Intra), ICC/IF

交差種: Human

交差が予測される動物種: Mouse, Rat 4

Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

ICC/IF: MCF7 cells. Flow Cyt (intra): MCF7 cells

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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製品の概要

由来種

標識

アプリケーション

種交差性

免疫原

ポジティブ・コントロール

特記事項

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). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 1% BSA, 30% Glycerol (glycerin, glycerine), PBS

精製度 Protein A purified

ポリ/モノ モノクローナル **クローン名** EPR4120

アイソタイプ lgG

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ab223402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
Flow Cyt (Intra)		1/50.
ICC/IF		1/100. This product gave a positive signal in MCF7 cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min)

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.

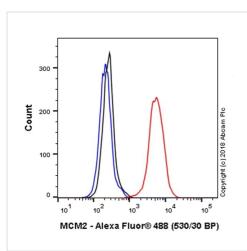
配列類似性 Belongs to the MCM family.

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.



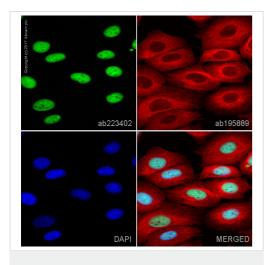
Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-MCM2 antibody [EPR4120] (ab223402)

Overlay histogram showing MCF7 cells stained with ab223402 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab223402, 1/50 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Alexa Fluor[®] 488 (<u>ab199091</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

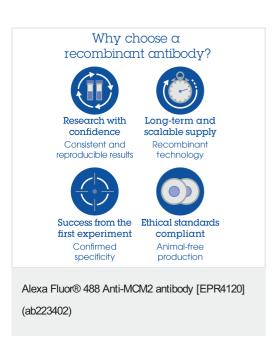
Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.

This antibody gave a positive signal in MCF7 cells fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-MCM2 antibody [EPR4120] (ab223402)

ab223402 staining MCM2 in MCF7 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab223402 at 1/100 dilution (shown in Green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). This product also gave a positive signal under the same testing conditions in MCF7 cells fixed with 4% formaldehyde (10 min).



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