

Product datasheet

Anti-MCM2 (phospho S27) antibody [EPR4119] ab109459

Recombinant RabMAb

5 Images

Overview

Product name	Anti-MCM2 (phospho S27) antibody [EPR4119]
Description	Rabbit monoclonal [EPR4119] to MCM2 (phospho S27)
Host species	Rabbit
Specificity	This antibody only detects MCM2 when phosphorylated at serine 27.
Tested applications	Suitable for: WB, IP, IHC-P, ICC/IF Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	A phospho specific peptide corresponding to residues surrounding serine 27 of Human MCM2.
Positive control	HeLa cell lysate and HeLa cells. Human cervical carcinoma tissue. Human tonsil tissue.
General notes	

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

This product is a recombinant rabbit monoclonal antibody.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR4119
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab109459** in the following tested applications.

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

Application	Abreviews	Notes
WB		1/10000 - 1/50000. Predicted molecular weight: 102 kDa.
IP		1/10 - 1/100.
IHC-P		1/100 - 1/250. Heat up to 98 degrees C, below boiling, and then let cool for 10-20 min.
ICC/IF		1/100 - 1/250.

Application notes Is unsuitable for Flow Cyt.

Target

Function

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.

Sequence similarities

Belongs to the MCM family.
Contains 1 MCM domain.

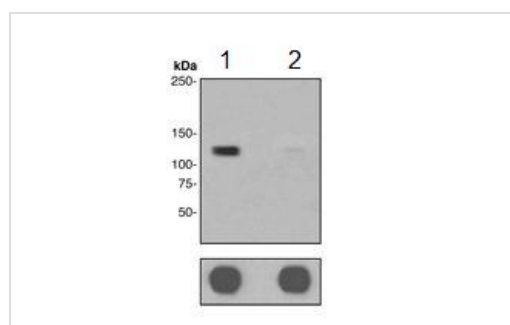
Post-translational modifications

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.

Cellular localization

Nucleus.

Images



Western blot - Anti-MCM2 (phospho S27) antibody [EPR4119] (ab109459)

All lanes : Anti-MCM2 (phospho S27) antibody [EPR4119] (ab109459) at 1/10000 dilution

Lane 1 : HeLa cell lysates untreated with alkaline phosphatase

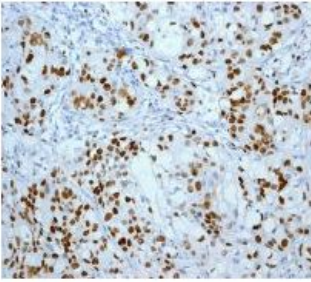
Lane 2 : HeLa cell lysates treated with alkaline phosphatase

Lysates/proteins at 10 µg per lane.

Secondary

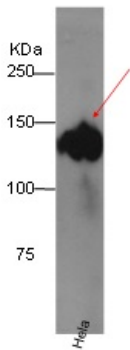
All lanes : HRP-labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 102 kDa



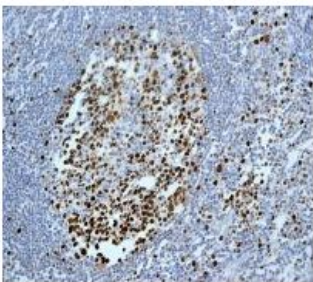
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S27) antibody [EPR4119] (ab109459)

ab109459 at 1/100 dilution staining MCM2 (phospho S27) in paraffin-embedded Human cervical carcinoma tissue by Immunohistochemistry.



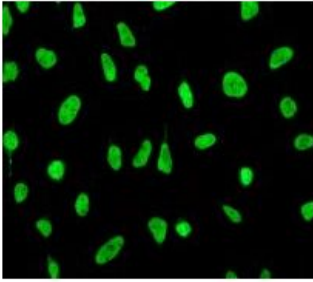
Immunoprecipitation - Anti-MCM2 (phospho S27) antibody [EPR4119] (ab109459)

MCM2 was immunoprecipitated from HeLa (Human epithelial cell line from cervix adenocarcinoma) with ab109459 at 1/100 dilution. Exposure time: 10 second.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 (phospho S27) antibody [EPR4119] (ab109459)

ab109459 at 1/100 dilution staining MCM2 (phospho S27) in paraffin-embedded Human tonsil tissue by Immunohistochemistry.



ab109459 at 1/100 dilution staining MCM2 (phospho S27) in HeLa cells by Immunofluorescence.

Immunocytochemistry/ Immunofluorescence - Anti-MCM2 (phospho S27) antibody [EPR4119] (ab109459)

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