

Product datasheet

Anti-MCM2 antibody - N-terminal ab227278

3 Images

Overview

Product name	Anti-MCM2 antibody - N-terminal
Description	Rabbit polyclonal to MCM2 - N-terminal
Host species	Rabbit
Tested applications	Suitable for: WB, IP, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Recombinant fragment within Human MCM2 (N terminal). The exact sequence is proprietary. Database link: P49736
Positive control	WB: HCT 116 whole cell lysate. IP: HCT 116 whole cell extract. ICC/IF: HCT 116 cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: PBS, 1% BSA, 20% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab227278** 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		1/500 - 1/3000. Predicted molecular weight: 102 kDa.

Application	Abreviews	Notes
IP		1/100 - 1/500.
ICC/IF		1/100 - 1/1000.

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.

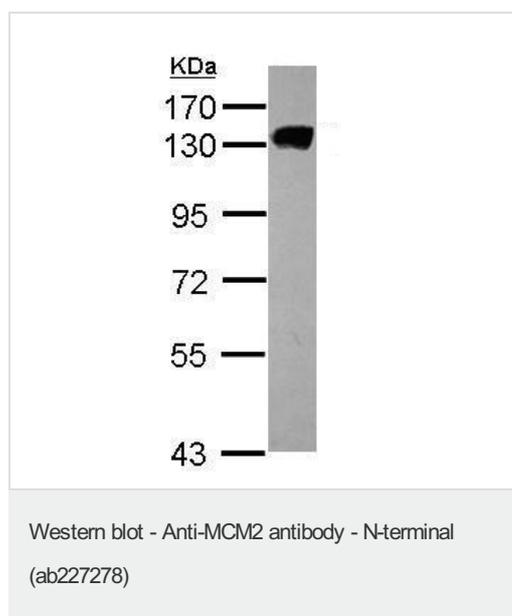
Post-translational modifications

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.

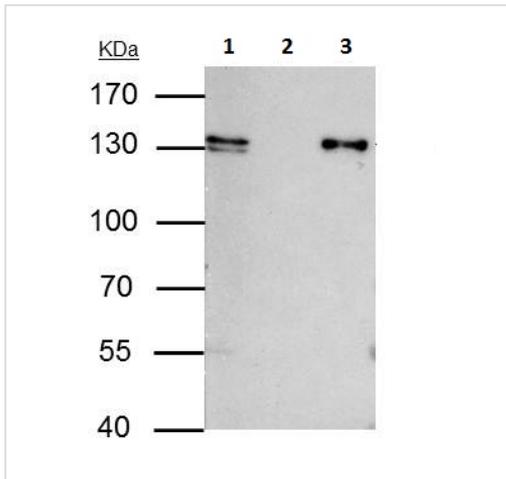
Images



Anti-MCM2 antibody - N-terminal (ab227278) at 1/1000 dilution +
HCT 116 (human colorectal carcinoma cell line) whole cell lysate at
30 µg

Predicted band size: 102 kDa

7.5% SDS-PAGE gel.



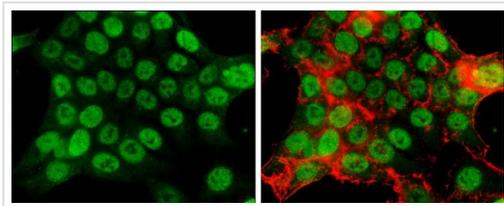
Immunoprecipitation - Anti-MCM2 antibody - N-terminal (ab227278)

MCM2 was immunoprecipitated from HCT 116 (human colorectal carcinoma cell line) whole cell lysate with 4 µg ab227278. Western blot was performed from the immunoprecipitate using ab227278 at 1/500 dilution.

Lane 1: HCT 116 whole cell extract 40 µg (Input).

Lane 2: Preimmune Rabbit IgG instead of ab227278 in HCT 116 whole cell extract.

Lane 3: ab227278 IP in HCT 116 whole cell extract.



Immunocytochemistry/ Immunofluorescence - Anti-MCM2 antibody - N-terminal (ab227278)

4% paraformaldehyde-fixed HCT 116 (human colorectal carcinoma cell line) cells stained for MCM2 (green) using ab227278 at 1/500 dilution in ICC/IF. Counterstain: Phalloidin cytoskeletal marker at 1/50 dilution.

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