

Product datasheet

Anti-MCM2 antibody [EPR3727] ab133325

Recombinant RabMAb

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Overview

Product name	Anti-MCM2 antibody [EPR3727]
Description	Rabbit monoclonal [EPR3727] to MCM2
Host species	Rabbit
Tested applications	Suitable for: WB, IP, IHC-P, ICC/IF, Flow Cyt (Intra)
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HeLa, Jurkat, and MCF-7 cell lysates; Human cervical carcinoma and tonsil tissues; HeLa cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR3727

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab133325 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		1/1000 - 1/10000. Predicted molecular weight: 102 kDa.
IP		1/10 - 1/100.
IHC-P		1/100 - 1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/200.
Flow Cyt (Intra)		Use at an assay dependent concentration.

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.

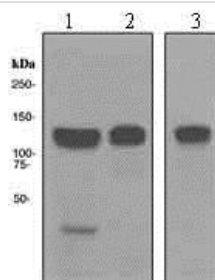
Post-translational modifications

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 antibody [EPR3727] (ab133325)

All lanes : Anti-MCM2 antibody [EPR3727] (ab133325) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : Jurkat cell lysate

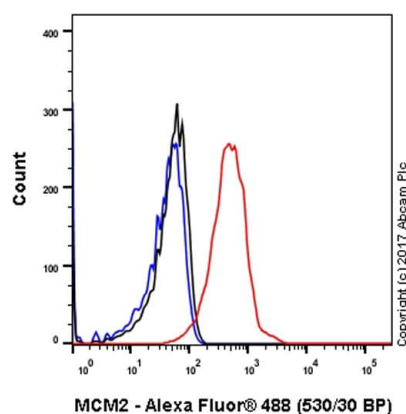
Lane 3 : MCF-7 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

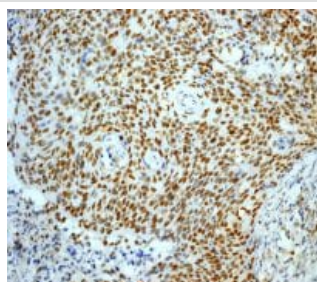
All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 102 kDa



Flow Cytometry (Intracellular) - Anti-MCM2 antibody [EPR3727] (ab133325)

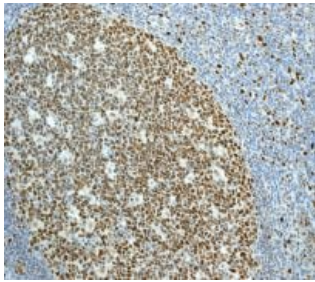
Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling MCM2 with unpurified ab133325 at 1/200 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody [EPR3727] (ab133325)

Immunohistochemical analysis of paraffin-embedded Human cervical carcinoma tissue labelling MCM2 with ab133325 at 1/100 dilution.

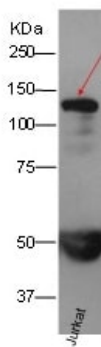
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody [EPR3727] (ab133325)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labelling MCM2 with ab133325 at 1/100 dilution.

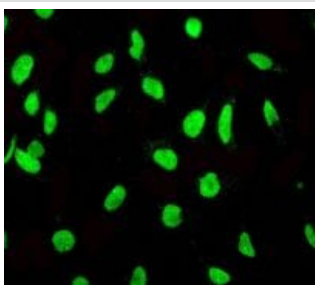
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-MCM2 antibody [EPR3727] (ab133325)

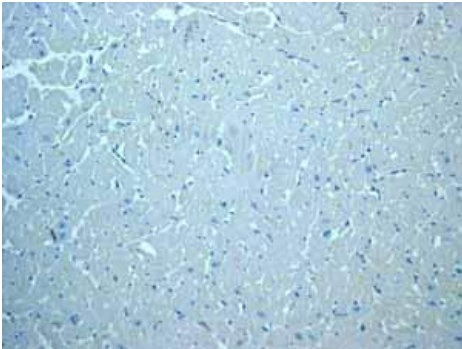
MCM2 was immunoprecipitated from Jurkat (Human T cell leukemia cell line from peripheral blood) with ab133325 at 1/60 dilution.

Exposure time: 10 second.



Immunocytochemistry/ Immunofluorescence - Anti-MCM2 antibody [EPR3727] (ab133325)

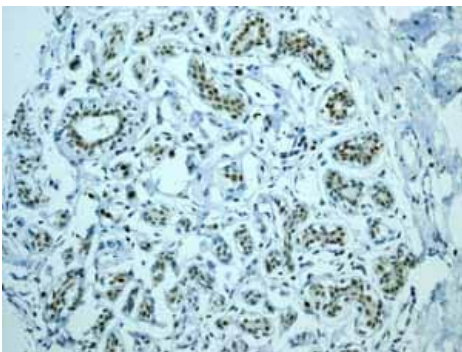
Immunofluorescent analysis of HeLa cells labelling MCM2 with ab133325 at 1/100 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody [EPR3727] (ab133325)

Immunohistochemical analysis of paraffin embedded normal Human heart tissue using ab133325 showing -ve staining.

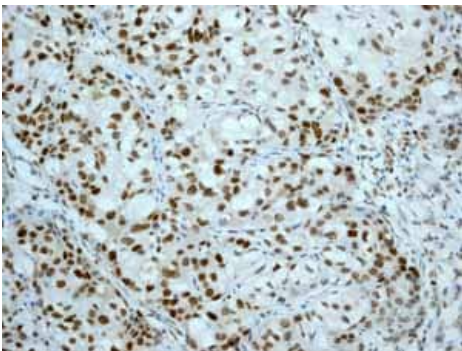
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody [EPR3727] (ab133325)

Immunohistochemical analysis of paraffin embedded normal Human breast tissue using ab133325 showing +ve staining.

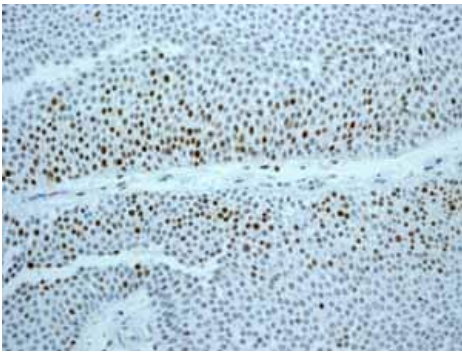
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody [EPR3727] (ab133325)

Immunohistochemical analysis of paraffin embedded Human Breast carcinoma tissue using ab133325 showing +ve staining.

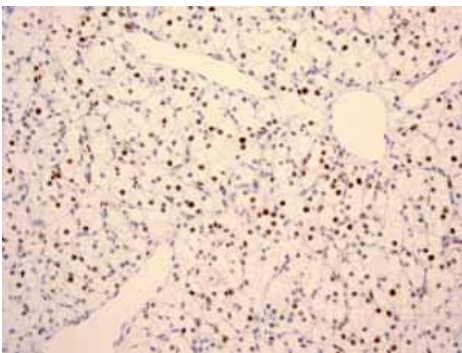
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody [EPR3727] (ab133325)

Immunohistochemical analysis of paraffin embedded Human Urinary bladder transitional carcinoma tissue using ab133325 showing +ve staining.

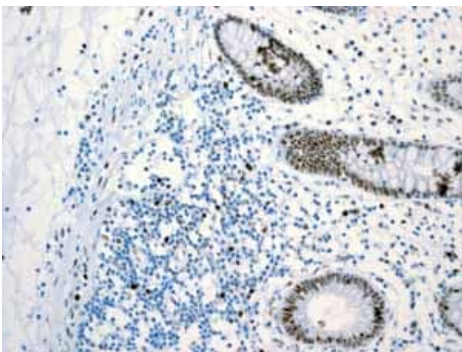
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody [EPR3727] (ab133325)

Immunohistochemical analysis of paraffin embedded Human Clear cell carcinoma of kidney tissue using ab133325 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MCM2 antibody [EPR3727] (ab133325)

Immunohistochemical analysis of paraffin embedded normal Human colon tissue using ab133325 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-MCM2 antibody [EPR3727] (ab133325)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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