abcam

ab14581

Anti-Mitotic proteins antibody [MPM-2]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.035% Sodium azide Constituents: 30% Glycerol (glycerin, glycerine), 1.37% Tris glycine, 0.61% Sodium chloride
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing Mitotic proteins protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	MPM-2
Purification technique	Affinity purification Protein G
Specificity	Recognizes a phosphorylated epitope (S/T)P found in phosphoproteins such as MAP2, HSP70, cdc25 and DNA topoisomerase IIa, most of which are phosphorylated at the onset of mitosis. The number of phosphoproteins recognized by MPM-2 varies from species to species and with the cell type. The clone number has been updated from (0.T.181) to (MPM-2) both clone numbers name the same antibody clone.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from TCS.

Reactivity data

ICC

Tested

Species	Human
Dilution info	-
Notes	-

IP

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ELISA

Expected

Species	Human
Dilution info	-
Notes	This antibody was used in a non-radioactive, dissociation-enhanced time resolved fluoroimmunoassa. Active enzymes were used to phosphorylate substrate peptides. The phosphorylated peptides were detected using MPM2 in conjunction with a europium (Eu3+) labeled secondary antibody. The phosphorylated peptides detected include: S1000-50 Serine Kinase Substrate Peptide (Biotin) (RRRAPLSP-N-Biotin) and S1000-80 Serine/Threonine Kinase Substrate Peptide, Recombinant, Human (Biotin).

WB

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human

Dilution info	-
Notes	-

ICC/IF

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information Phospho mitotic protein (LTPLK)

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.
This product was changed from ascites to tissue culture supernatant on 11-June-19. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

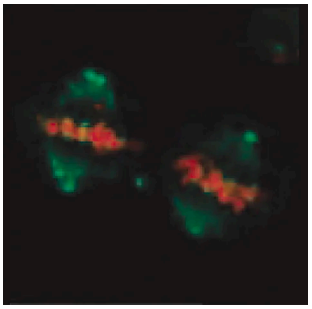
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

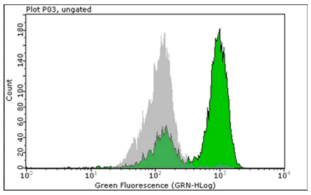
6 product images



Immunocytochemistry - Anti-Mitotic proteins antibody [MPM-2] (ab14581)

Mitotic proteins Immunocytochemistry staining using mouse Anti-Mitotic proteins antibody

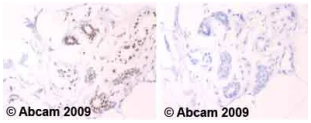
ab14581 (green) labeling phospho-proteins in metaphase cells. The spindle, centrosomes and centromeric regions are stained. DNA is counterstained with propidium iodide (red).



Flow Cytometry (Intracellular) - Anti-Mitotic proteins antibody [MPM-2] (ab14581)

Mitotic proteins Flow Cytometry (Intracellular) staining using mouse Anti-Mitotic proteins antibody

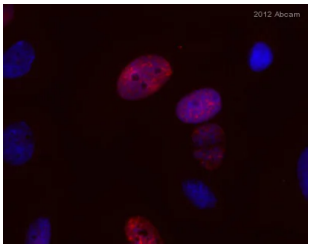
Flow Cytometry analysis using anti-phospho-Ser/Thr-Pro, MPM-2 (ab14581). HeLa cells were treated with colcemid (green), or untreated (grey).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Mitotic proteins antibody [MPM-2] (ab14581)

Mitotic proteins Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Mitotic proteins antibody

ab14581 staining human normal skin. Staining is localised to the nucleus.
Left panel: with primary antibody at 2 ug/ml. Right panel: isotype control.
Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 antigen retrieval buffer EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H2O2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.
This image was generated using the ascites version of the product.

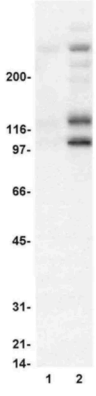


This image is courtesy of an anonymous customer review

Immunocytochemistry - Anti-Mitotic proteins antibody [MPM-2] (ab14581)

Mitotic proteins Immunocytochemistry staining using mouse Anti-Mitotic proteins antibody

ab14581 staining Mitotic proteins - Mitosis Marker in Human Saos-2 cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.25% Triton in PBS and blocked with 1% BSA for 1 hour at room temperature. Samples were incubated with primary antibody (1/500) for 1 hour. An Alexa Fluor® 594-conjugated Goat anti-mouse IgG polyclonal (1/250) was used as the secondary antibody.
This image was generated using the ascites version of the product.



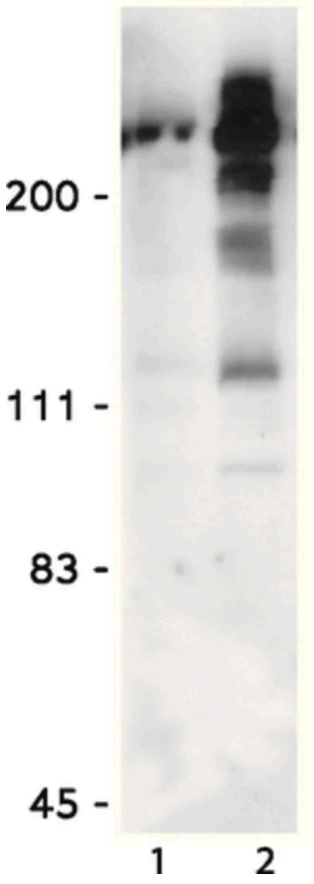
Western blot - Anti-Mitotic proteins antibody [MPM-2] (ab14581)

All lanes:
Western blot - Anti-Mitotic proteins antibody [MPM-2] (ab14581) at 2 µg

Lane 1:
Non-treated HeLa

Lane 2:
Colcemid-treated HeLa

Predicted band size: 92 kDa



Western blot - Anti-Mitotic proteins antibody [MPM-2] (ab14581)

All lanes:
Western blot - Anti-Mitotic proteins antibody [MPM-2] (ab14581) at 2 µg

Lane 1:
Non treated HeLa cells at 20 µg

Lane 2:
Colcemid-treated HeLa cells at 20 µg

Predicted band size: 92 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.