

Product datasheet

Anti-MSI2 antibody [EP1305Y] ab76148

KO VALIDATED Recombinant RabMAb

★★★★★ 1 Abreviews 30 References 12 Images

Overview

Product name	Anti-MSI2 antibody [EP1305Y]
Description	Rabbit monoclonal [EP1305Y] to MSI2
Host species	Rabbit
Tested applications	Suitable for: IP, ICC/IF, WB, IHC-P, Flow Cyt
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	A synthetic peptide derived from Human MSI2 (UniProt: Q96DH6).
Epitope	Based on the immunogen sequence for this antibody, it is not predicted to detect the shorter isoforms of MSI2.
Positive control	WB: HeLa, A549 MCF7, HAP1, Rat brain, Human brain, A549 , SW480 and T47D cell lysates IHC-P: Human placenta, Human bladder carcinoma Tissue IP: T-47D cell lysate. ICC/IF: PC12 and MCF7 cells Flow Cyt: T-47D and 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>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

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. Avoid freeze / thaw cycle.

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1305Y
Isotype	IgG

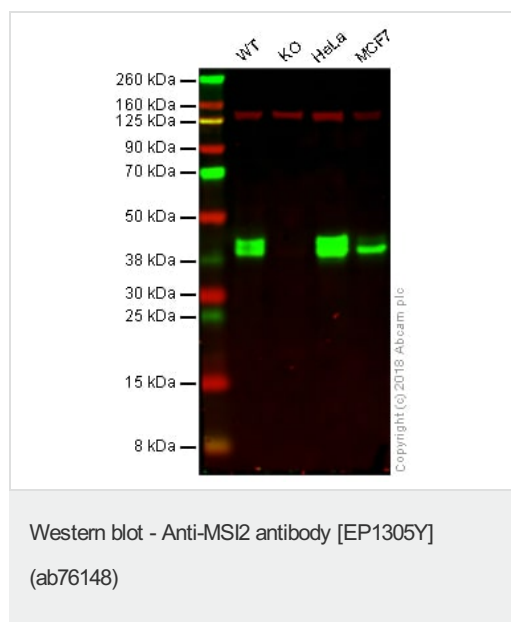
Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab76148 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
IP		1/50.
ICC/IF		1/100.
WB		1/1000 - 1/2000. Detects a band of approximately 35 kDa (predicted molecular weight: 35 kDa).
IHC-P	★★★★★ (1)	1/500. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat. See IHC antigen retrieval protocols. For unpurified use at 1/100 - 1/250.
Flow Cyt		1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurified use at 1/30

Target

Function	RNA binding protein that regulates the expression of target mRNAs at the translation level. May play a role in the proliferation and maintenance of stem cells in the central nervous system.
Tissue specificity	Ubiquitous; detected at low levels.
Involvement in disease	Note=Chromosomal aberrations involving MS12 may contribute to disease progression in chronic myeloid leukemia. Translocation t(7;17)(p15;q23) with HOXA9; translocation t(7;17)(q32-34;q23).
Sequence similarities	Belongs to the Musashi family. Contains 2 RRM (RNA recognition motif) domains.
Post-translational modifications	Phosphorylated.
Cellular localization	Cytoplasm. Associated with polysomes.



All lanes : Anti-MSI2 antibody [EP1305Y] (ab76148) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : MSI2 knockout HAP1 whole cell lysate

Lane 3 : HeLa whole cell lysate

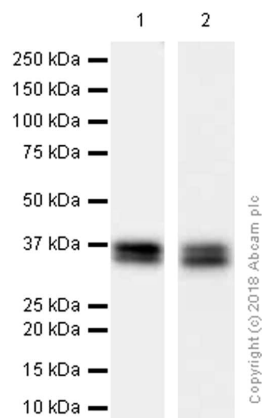
Lane 4 : MCF7 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 35 kDa

Lanes 1 -4: Merged signal (red and green). Green - ab76148 observed at 40 kDa. Red - loading control, [ab18058](#), observed at 130 kDa.

ab76148 was shown to specifically react with MSI2 in wild-type HAP1 cells as signal was lost in MSI2 knockout cells. Wild-type and MSI2 knockout samples were subjected to SDS-PAGE. Ab76148 and [ab18058](#) (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-MSI2 antibody [EP1305Y]
(ab76148)

All lanes : Anti-MSI2 antibody [EP1305Y] (ab76148) at 1/1000 dilution

Lane 1 : Mouse brain lysates

Lane 2 : Rat brain lysates

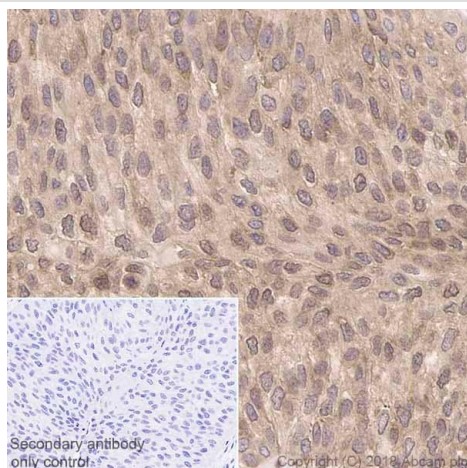
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 35 kDa

Observed band size: 35 kDa



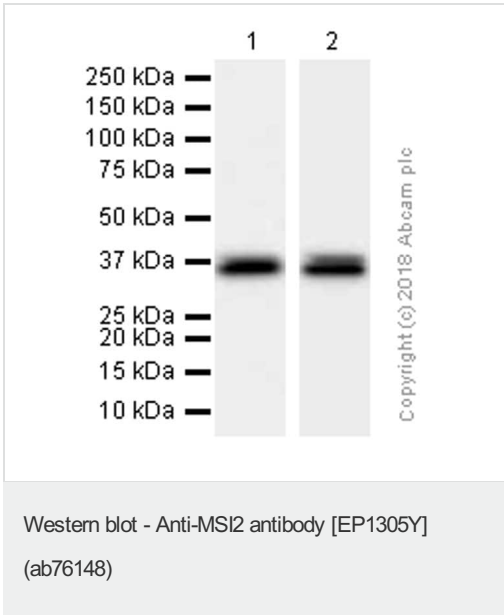
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MSI2 antibody [EP1305Y] (ab76148)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human bladder carcinoma tissue sections labeling MSI2 with purified ab76148 at 1:500 dilution (2.14 µg/ml).

Heat mediated antigen retrieval was performed using ab93684

(Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody.

Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



All lanes : Anti-MSI2 antibody [EP1305Y] (ab76148) at 1/1000 dilution

Lane 1 : T-47D (Human ductal breast epithelial tumor epithelial cell) whole cell lysates

Lane 2 : A549 (Human lung carcinoma epithelial cell) whole cell lysates

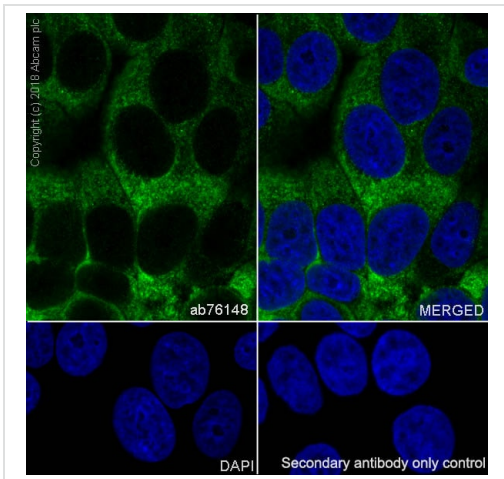
Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

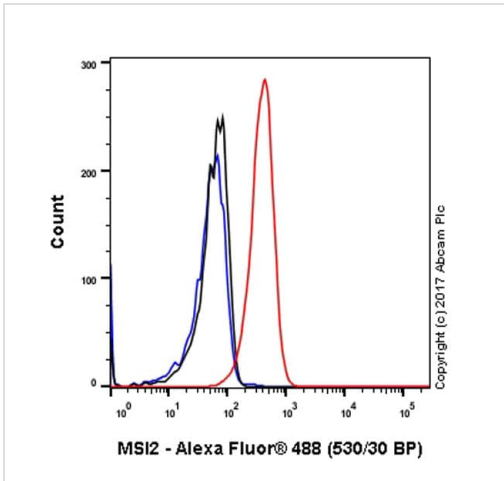
Predicted band size: 35 kDa

Observed band size: 35 kDa



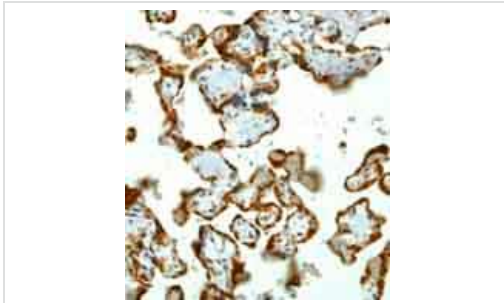
Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling MSI2 with purified ab76148 at 1:100 dilution (10 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with None. Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

Immunocytochemistry/ Immunofluorescence - Anti-MSI2 antibody [EP1305Y] (ab76148)



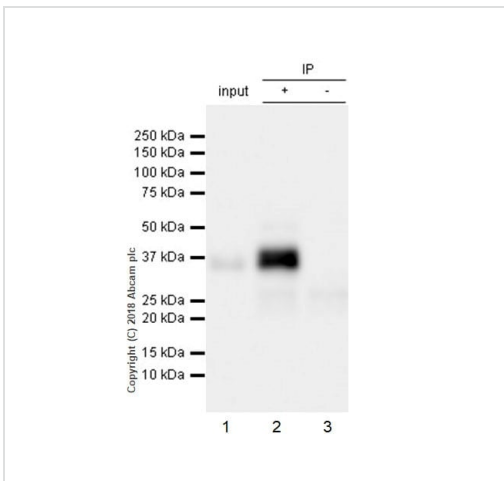
Flow Cytometry - Anti-MSI2 antibody [EP1305Y] (ab76148)

Flow Cytometry analysis of T-47D (Human ductal breast epithelial tumor epithelial cell) cells labeling MSI2 with purified ab76148 at 1:100 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MSI2 antibody [EP1305Y] (ab76148)

Immunohistochemical analysis of paraffin-embedded human placenta with ab76148 at 1/100-1/250 dilution. Heat mediated antigen retrieval was performed via the pressure cooker method before commencing with IHC staining protocol.



Immunoprecipitation - Anti-MSI2 antibody [EP1305Y] (ab76148)

All lanes : Anti-MSI2 antibody [EP1305Y] (ab76148) at 1/1000 dilution

Lane 1 : T-47D (Human ductal breast epithelial tumor epithelial cell) whole cell lysate at 10 µg with 5% NFDN/TBST

Lane 2 : T-47D whole cell lysate. ab76148 use as the capture antibody at 1:50 dilution. with 5% NFDN/TBST

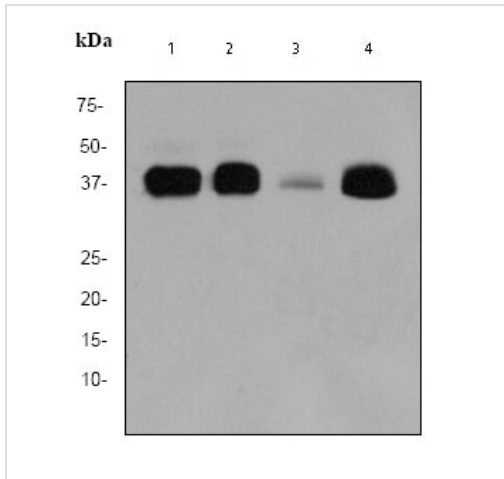
Lane 3 : T-47D whole cell lysate. [ab172730](#) use as the capture antibody at 1:50 dilution. with 5% NFDN/TBST

Secondary

All lanes : VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/5000 dilution (VeriBlot for IP secondary antibody (HRP))

Observed band size: 35 kDa

Exposure time: 5 seconds



Western blot - Anti-MSI2 antibody [EP1305Y] (ab76148)

All lanes : Anti-MSI2 antibody [EP1305Y] (ab76148) at 1/2000 dilution

Lane 1 : Rat brain cell lysates

Lane 2 : Human brain cell lysates

Lane 3 : SW480 cell lysates

Lane 4 : T47D cell lysates

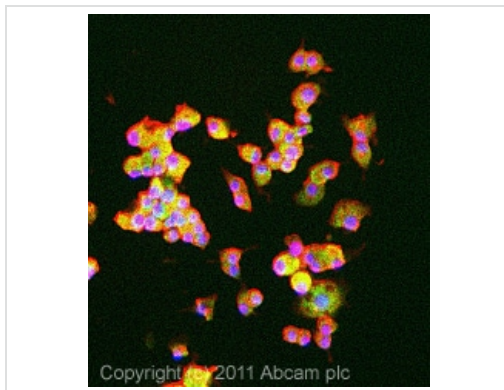
Lysates/proteins at 10 µg per lane.

Secondary

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

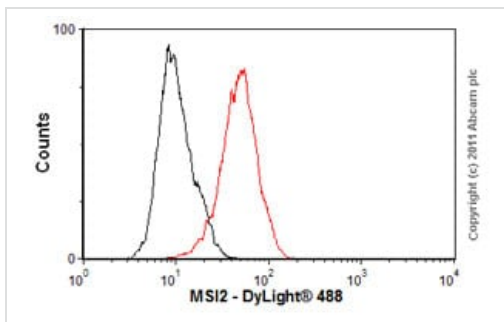
Predicted band size: 35 kDa

Observed band size: 35 kDa



Immunocytochemistry/ Immunofluorescence - Anti-MSI2 antibody [EP1305Y] (ab76148)

ICC/IF image of ab76148 stained PC12 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab76148, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.




Flow Cytometry - Anti-MSI2 antibody [EP1305Y] (ab76148)

Overlay histogram showing HeLa cells stained with ab76148 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76148, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in HeLa cells fixed with 80% methanol (5 min)/permeabilized in 0.1% PBS-Tween for

20 min used under the same conditions.

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-MSI2 antibody [EP1305Y] (ab76148)

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

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