

Anti-TROP2 antibody [EPR20043] ab214488

KO 評価済 リコンビナント RabMAb

★★★★★ 9 Abreviews 14 References 画像数 14

製品の概要

製品名	Anti-TROP2 antibody [EPR20043]
製品の詳細	Rabbit monoclonal [EPR20043] to TROP2
由来種	Rabbit
アプリケーション	適用あり: Flow Cyt (Intra), WB, ICC/IF, IHC-P
種交差性	交差種: Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HCT 116, PC-3 and MCF7 whole cell lysates; human breast cancer, skin, placenta and prostate cancer lysates, Mouse and rat skin and lung lysate, mouse kidney lysate. IHC-P: Human skin, breast and cervix cancer tissues; mouse and rat skin tissues. ICC/IF: MCF7 and HCT 116 cells. Flow Cyt (intra): MCF7 cells.
特記事項	<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>

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR20043

アプリケーション

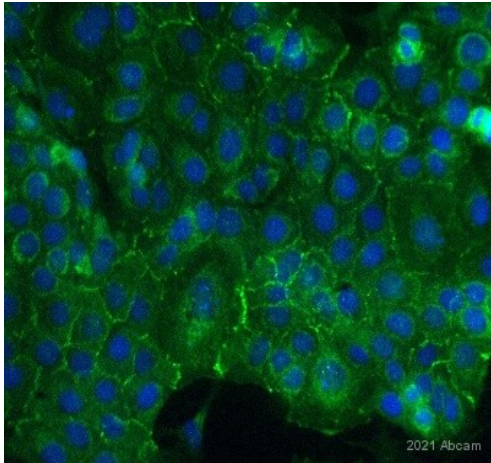
The Abpromise guarantee Abpromise保証は、 次のテスト済みアプリケーションにおけるab214488の使用に適用されます
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/60. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/2000. Detects a band of approximately 37-50 kDa (predicted molecular weight: 36 kDa).
ICC/IF	★★★★★ (1)	1/100.
IHC-P	★★★★★ (4)	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. ab214488 is recommended for mouse and rat in IHC

ターゲット情報

機能	May function as a growth factor receptor.
組織特異性	Placenta, pancreatic carcinoma cell lines.
関連疾患	Defects in TACSTD2 are the cause of gelatinous drop-like corneal dystrophy (GDLD) [MIM:204870]; also known as lattice corneal dystrophy type III. GDLD is an autosomal recessive disorder characterized by grayish corneal amyloid deposits that cause severe visual impairment.
配列類似性	Belongs to the EPCAM family. Contains 1 thyroglobulin type-1 domain.
翻訳後修飾	The N-terminus is blocked.
細胞内局在	Membrane.

画像

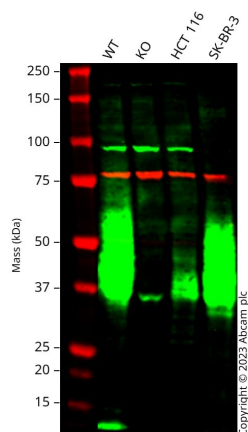


Immunocytochemistry - Anti-TROP2 antibody

[EPR20043] (ab214488)

This image is courtesy of an anonymous Abreview

Immunocytochemistry analysis of acetone-fixed human keratinocytes staining with ab214488 at 1/500 dilution. Secondary antibody was Alexa Fluor® 488 Goat anti-rabbit-IgG at 1/500 dilution. Samples were incubated with the primary antibody with PBS for 1 hour at 21°C. Blocking was done using 4% serum for 30 minutes at 21°C



Western blot - Anti-TROP2 antibody [EPR20043]

(ab214488)

All lanes : Anti-TROP2 antibody [EPR20043] (ab214488) at 1/2000 dilution

Lane 1 : Wild-type MCF7 cell lysate

Lane 2 : TACSTD2 knockout MCF7 cell lysate

Lane 3 : HCT 116 cell lysate

Lane 4 : SK-BR-3 cell lysate

Lysates/proteins at 20 µg per lane.

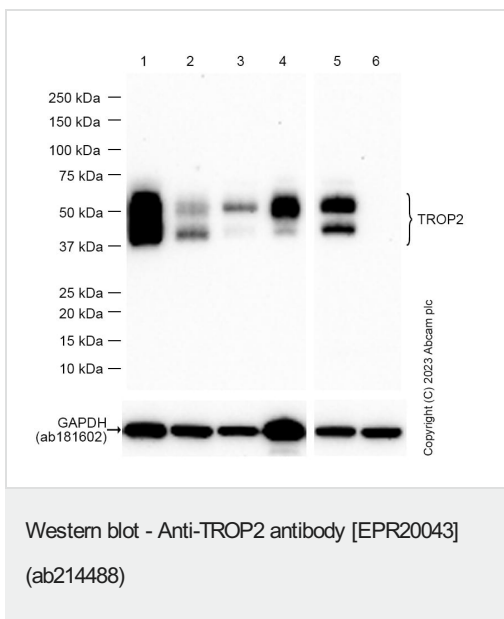
Performed under reducing conditions.

Predicted band size: 36 kDa

Observed band size: 36-70 kDa

Western blot: Anti-TACSTD2 antibody [EPR20043] (ab214488) staining at 1/2000 dilution, shown in green; Mouse anti-CANX [CANX/1543] ([ab238078](#)) loading control staining at 1/20000

dilution, shown in red. In Western blot, ab214488 was shown to bind specifically to TACSTD2. A band was observed at 36-70 kDa in wild-type MCF7 cell lysates with no signal observed at this size in TACSTD2 knockout cell line. To generate this image, wild-type and TACSTD2 knockout MCF7 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1% Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



All lanes : Anti-TROP2 antibody [EPR20043] (ab214488) at 1/2000 dilution

Lane 1 : Mouse skin lysate at 20 µg

Lane 2 : Mouse kidney lysate at 20 µg

Lane 3 : Mouse lung lysate at 20 µg

Lane 4 : Rat skin lysate at 20 µg

Lane 5 : Rat lung lysate at 20 µg

Lane 6 : A549 (Human lung carcinoma epithelial cell) whole cell lysate

Secondary

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

Predicted band size: 36 kDa

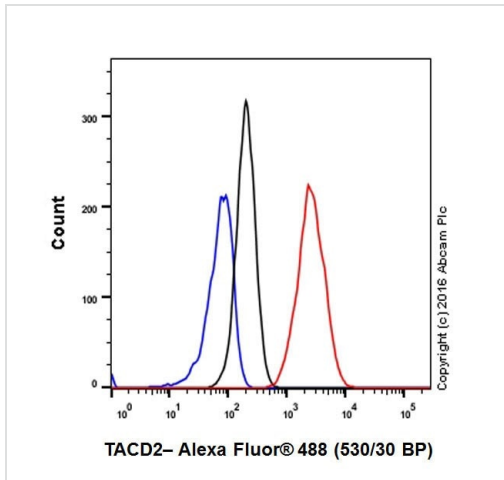
Exposure time: 60 seconds

Blocking and diluting buffer and concentration: 5% NFDM /TBST.

[ab181602](#) was used as a GAPDH loading control.

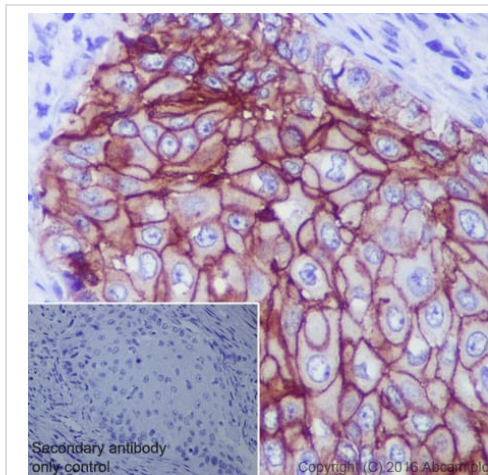
Negative sample: A549 (PMID: 22419550).

TROP2 is highly glycosylated and appears as band around 37-50kDa. The molecular weight observed is consistent with what has been described in the literature (PMID: 23070813).



Flow Cytometry (Intracellular) - Anti-TROP2 antibody
[EPR20043] (ab214488)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed MCF7 (Human breast adenocarcinoma cell line) cells labeling TROP2 with ab214488 at 1/60 dilution (red) compared with aRabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody. The permeabilization step was done using 90% methanol for 30 mins at -20 degrees.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody
[EPR20043] (ab214488)

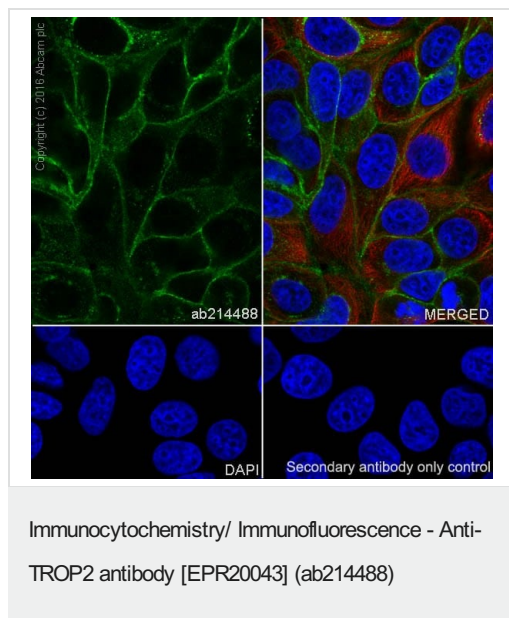
Immunohistochemical analysis of paraffin-embedded human cervix cancer tissue labeling TROP2 with ab214488 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Membrane staining on the tumor cells of human cervix cancer is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF7 (Human breast adenocarcinoma cell line) cells labeling TROP2 with ab214488 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

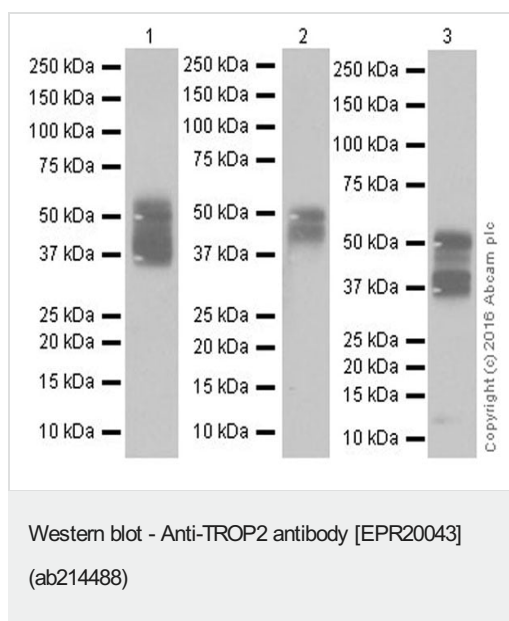
Confocal image showing membrane and weakly cytoplasmic staining on MCF7 cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



All lanes : Anti-TROP2 antibody [EPR20043] (ab214488) at 1/2000 dilution

Lane 1 : HCT 116 (Human colorectal carcinoma cell line) whole cell lysate

Lane 2 : PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

Lane 3 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 36 kDa

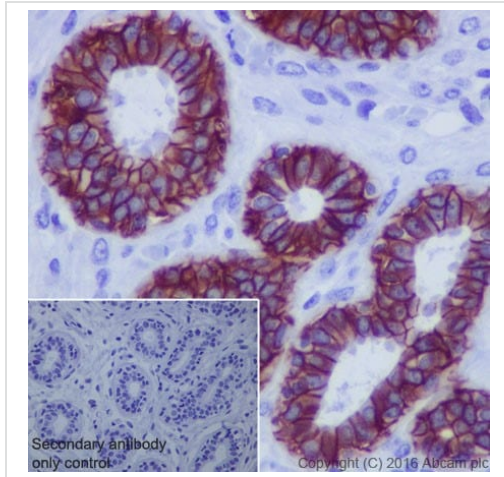
Observed band size: 37-50 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1/3: 2 seconds; Lane 2: 1 minute.

TROP2 is highly glycosylated and appears as band around 37-50kDa. The molecular weight observed is consistent with what has

been described in the literature (PMID: 23070813)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] (ab214488)

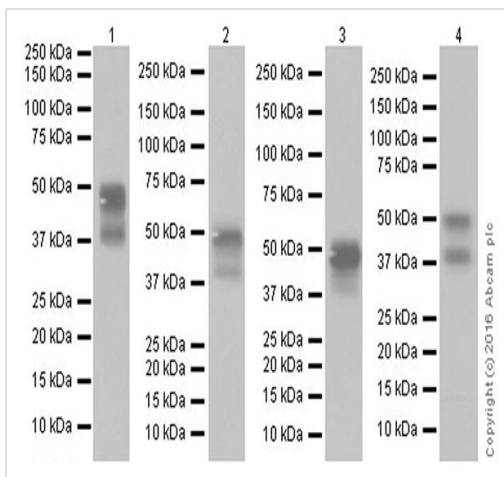
Immunohistochemical analysis of paraffin-embedded human breast tissue labeling TROP2 with ab214488 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Membrane staining on the duct epithelium of human breast is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-TROP2 antibody [EPR20043] (ab214488)

Lanes 1-3 : Anti-TROP2 antibody [EPR20043] (ab214488) at 1/2000 dilution

Lane 4 : Anti-TROP2 antibody [EPR20043] (ab214488) at 1/5000 dilution

Lane 1 : Human breast cancer lysate

Lane 2 : Human skin lysate

Lane 3 : Human placenta lysate

Lane 4 : Human prostate cancer lysate

Lysates/proteins at 10 µg per lane.

Secondary

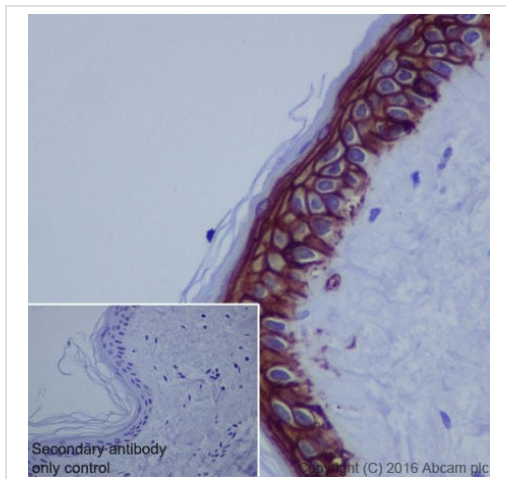
All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 36 kDa

Observed band size: 37-50 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1/3: 3 seconds; Lane 2: 5 seconds; Lane 4: 15 seconds.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] (ab214488)

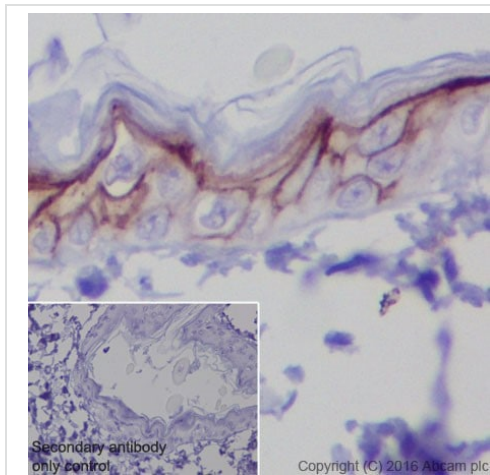
Immunohistochemical analysis of paraffin-embedded human skin tissue labeling TROP2 with ab214488 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Membrane staining on the squamous epithelium of human skin is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



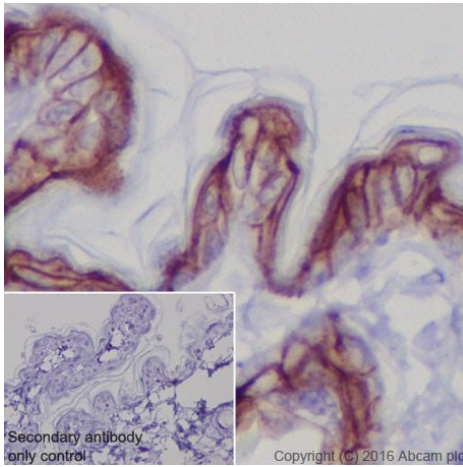
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] (ab214488)

Immunohistochemical analysis of paraffin-embedded rat skin tissue labeling TACD2 with ab214488 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Membrane staining on the squamous epithelium of rat skin is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TROP2 antibody [EPR20043] (ab214488)

Immunohistochemical analysis of paraffin-embedded mouse skin tissue labeling TROP2 with ab214488 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

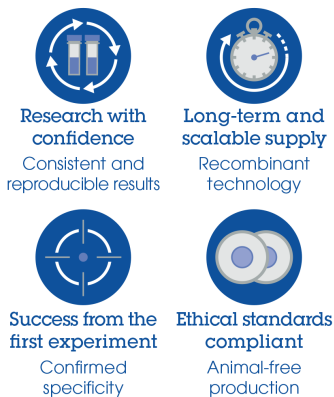
Membrane staining on the squamous epithelium of mouse skin is observed.

Counter stained with Hematoxylin.

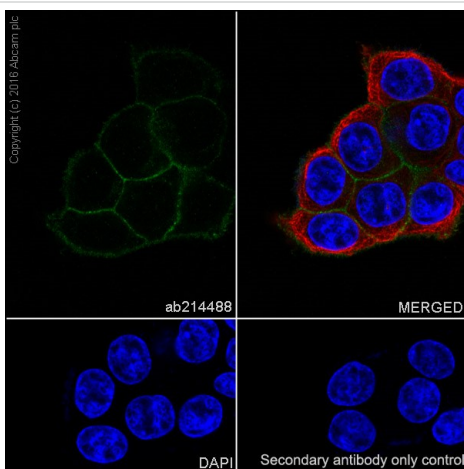
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Anti-TROP2 antibody [EPR20043] (ab214488)



Immunocytochemistry/ Immunofluorescence - Anti-TROP2 antibody [EPR20043] (ab214488)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HCT 116 (Human colorectal carcinoma cell line) cells labeling TROP2 with ab214488 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing membrane staining on HCT 116 cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG (Alexa Fluor® 488) (**ab150077**) at 1/1000 dilution.

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