# abcam

## Product datasheet

## Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker ab179503

יעלאעבע RabMAb

★★★★★ 3 Abreviews 21 References 画像数 12

#### 製品の概要

製品名 Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker

製品の詳細 Rabbit monoclonal [EPR16793] to gamma Tubulin - Centrosome Marker

由来種 Rabbit

アプリケーション 適用あり: WB, ICC/IF, IHC-P, Flow Cyt (Intra), IP

種交差性 交差種: Mouse, Rat, Chicken, Hamster, Cow, Dog, Human, Zebrafish, African green monkey,

Xenopus tropicalis

交差が予測される動物種: Fish, Monkey 4

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HeLa, MDCK, MDBK, COS-1, Jurkat, C6, RAW 264.7, PC-12, NIH/3T3, UMNSAH/DF-1

> and BHK whole cell lysates; Zebrafish lysates and Xenopus (X. tropicalis) muscle lysates; Human fetal brain, fetal heart, and fetal kidney lysates; Mouse brain and spleen lysates; Rat brain, heart and kidney lysates. IHC-P: Human breast carcinoma, Mouse testis and Rat testis tissues. ICC/IF:

HeLa cells. Flow: UMNSAH/DF-1 cells. IP: HeLa whole cell extract.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information **see here**.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® patents.

## 製品の特性

製品の状態

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 Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** EPR16793

アイソタイプ IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab179503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
WB		1/2000. Detects a band of approximately 48 kDa (predicted molecular weight: 51 kDa).
ICC/IF	<b>★★★★</b> ☆ (1)	1/500.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/80. <u>ab172730</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IP		1/30.

## ターゲット情報

機能 Tubulin is the major constituent of microtubules. Gamma tubulin is found at microtubule organizing

centers (MTOC) such as the spindle poles or the centrosome. Pericentriolar matrix component that regulates alpha/beta tubulin minus-end nucleation, centrosome duplication and spindle

formation.

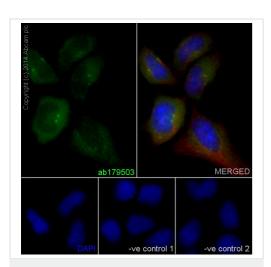
**配列類似性** Belongs to the tubulin family.

翻訳後修飾 Phosphorylation at Ser-131 by BRSK1 regulates centrosome duplication, possibly by mediating

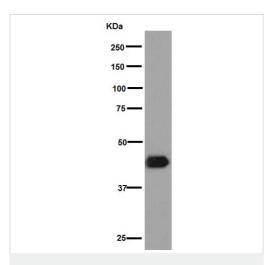
relocation of gamma-tubulin and its associated proteins from the cytoplasm to the centrosome.

**細胞内局在** Cytoplasm > cytoskeleton > centrosome.

#### 画像



Immunocytochemistry/ Immunofluorescence - Antigamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)



Western blot - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling gamma Tubulin with ab179503 at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/400 dilution (green). Cytoplasmic and centrosome staining on HeLa cell line is observed. The nuclear counter stain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/500 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows;

1. ab179503 at 1/500 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
2. **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/400 dilution.

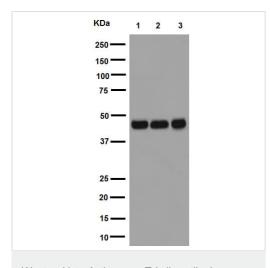
Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503) at 1/20000 dilution + Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysates at 20  $\mu$ g

#### Secondary

Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 51 kDa **Observed band size:** 48 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)



Lane 1 : Human fetal brain lysates

Lane 2 : Human fetal heart lysates

Lane 3 : Human fetal kidney lysates

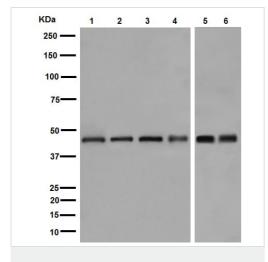
Lysates/proteins at 10 µg per lane.

## Secondary

**All lanes :** Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 51 kDa
Observed band size: 48 kDa





Western blot - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)

**All lanes :** Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503) at 1/2000 dilution

**Lane 1**: HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysates

Lane 2 : MDCK (Canine kidney cell line) whole cell lysates
Lane 3 : MDBK (Bovine kidney cell line) whole cell lysates

Lane 4 : COS-1 (African green monkey kidney fibroblast-like cell line) whole cell lysates

Lane 5 : Zebrafish lysates

Lane 6: Xenopus (X. tropicalis) muscle lysates

Lysates/proteins at 20 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 51 kDa **Observed band size:** 48 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

KDa 1 2
250 —
150 —
100 —
75 —
50 —
37 —
25 —
20 —
16 —
10 —

Western blot - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503) **All lanes :** Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503) at 1/20000 dilution

Lane 1: UMNSAH/DF-1 (Transformed chicken embyronic

fibroblast cells) whole cell lysates

Lane 2: BHK (Hamster kidney fibroblast cells) whole cell lysates

Lysates/proteins at 20 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 51 kDa **Observed band size:** 48 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

KDa 1 2 3 4 5 6 7 8 9

250—
150—
100—
75—
50—
25—
20—
15—
10—

Western blot - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503) **All lanes :** Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503) at 1/2000 dilution

Lane 1: Mouse brain lysates

Lane 2: Mouse spleen lysates

Lane 3: Rat brain lysates

Lane 4: Rat heart lysates

Lane 5: Rat kidney lysates

Lane 6: C6 (Rat glial tumor cells) whole cell lysates

Lane 7: RAW 264.7 (Mouse macrophage cells transformed with

Abelson murine leukemia virus) whole cell lysates

Lane 8 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell

lysates

Lane 9: NIH/3T3 (Mouse embyro fibroblast cells) whole cell lysates

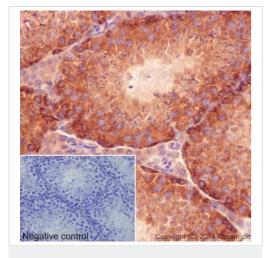
Lysates/proteins at 10 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L),Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 51 kDa **Observed band size:** 48 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)

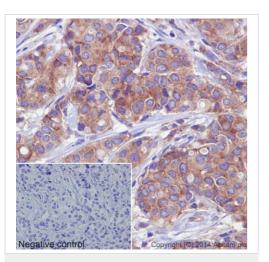
Immunohistochemical analysis of paraffin-embedded Mouse testis tissue labeling gamma Tubulin with ab179503 at 1/250 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse lgG.

Cytoplasmic staining on epithelial cells of mouse testis is observed.

Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

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

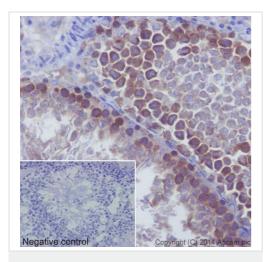


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling gamma Tubulin with ab179503 at 1/250 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Cytoplasmic staining on tumor cells of breast carcinoma is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)

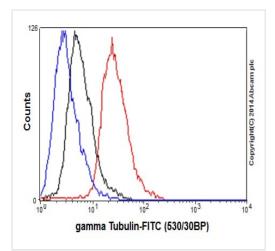
Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling gamma Tubulin with ab179503 at 1/250 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse lgG.

Cytoplasm staining on epithelial cells of rat testis is observed.

Counter stained with Hematoxylin.

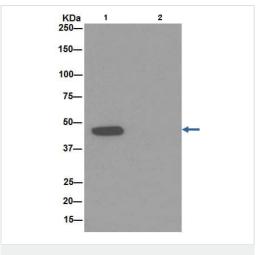
Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse lgG.

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



Flow Cytometry (Intracellular) - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)

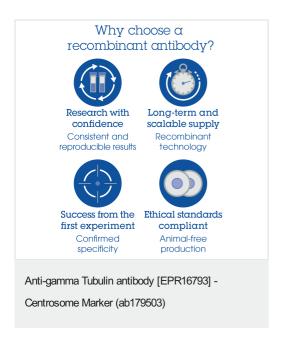
Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed UMNSAH/DF-1 (Transformed chicken embyronic fibroblast cells) cells labeling gamma Tubulin with ab179503 at 1/80 dilution (red) compared with a rabbit monoclonal lgG isotype control (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit lgG (FITC) at 1/150 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-gamma Tubulin antibody [EPR16793] - Centrosome Marker (ab179503)

Gamma Tubulin was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell extract with ab179503 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab179503 at 1/1000 dilution. Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG was used as secondary antibody at 1/1500 dilution. Lane 1: HeLa whole cell extract. Lane 2: PBS instead of HeLa whole cell extract.

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



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