


## Product datasheet

### Anti-TCTEX-1 antibody [EPR17294] ab202583

Recombinant RabMAb

[1 References](#) [11 Images](#)

#### Overview

<b>Product name</b>	Anti-TCTEX-1 antibody [EPR17294]
<b>Description</b>	Rabbit monoclonal [EPR17294] to TCTEX-1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), IHC-P, WB, ICC/IF, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: PC-3, SH-SY5Y, HeLa, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; Human fetal brain, fetal heart and fetal spleen lysates. IHC-P: Human cervix carcinoma, Human colonic carcinoma and mouse kidney tissues. ICC/IF: HT-29 and SH-SY5Y cells. Flow Cyt (intra): HeLa cells. IP: HeLa whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

Clone number                      EPR17294

Isotype                                IgG

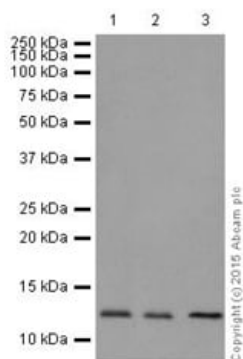
## Applications

**The Abpromise guarantee**              Our **Abpromise guarantee** covers the use of ab202583 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
Flow Cyt (Intra)		1/150.
IHC-P		1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/2000. Detects a band of approximately 12 kDa (predicted molecular weight: 12 kDa).
ICC/IF		1/500.
IP		1/50.

## Target

<b>Function</b>	<p>Acts as one of several non-catalytic accessory components of the cytoplasmic dynein 1 complex that are thought to be involved in linking dynein to cargos and to adapter proteins that regulate dynein function. Cytoplasmic dynein 1 acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules. Binds to transport cargos and is involved in apical cargo transport such as rhodopsin-bearing vesicles in polarized epithelia. Is involved in intracellular targeting of D-type retrovirus gag polyproteins to the cytoplasmic assembly site. May also be a accessory component of axonemal dynein.</p> <p>Plays a role in neuronal morphogenesis; the function is independent of cytoplasmic dynein and seems to be coupled to regulation of the actin cytoskeleton by enhancing Rac1 activity. The function in neurogenesis may be regulated by association with a G-protein beta-gamma dimer. May function as a receptor-independent activator of heterotrimeric G-protein signaling; the activation appears to be independent of a nucleotide exchange. Plays a role in regulating neurogenesis; inhibits the genesis of neurons from precursor cells during cortical development presumably by antagonizing ARHGEF2. Involved in the regulation of mitotic spindle orientation.</p>
<b>Tissue specificity</b>	Expressed in heart, placenta, skeletal muscle kidney, pancreas, spleen, prostate, testis, ovary, ileum and colon. Expressed in lung endothelial and smooth muscle cells (at protein level).
<b>Sequence similarities</b>	Belongs to the dynein light chain Tctex-type family.
<b>Post-translational modifications</b>	Phosphorylated by BMPR2; the phosphorylation is abolished by BMPR2 mutations in exon 12 which lead to truncated forms of BMPR2 and which are linked to primary pulmonary hypertension (PPH1) [MIM:178600]. The phosphorylation status is proposed to regulate the association with the cytoplasmic dynein complex and may have role in cytoplasmic dynein cargo release.
<b>Cellular localization</b>	Golgi apparatus. Cytoplasm. Cytoplasm > cytoskeleton > spindle. Localizes to mitotic spindles.



Western blot - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

**All lanes :** Anti-TCTEX-1 antibody [EPR17294] (ab202583) at 1/10000 dilution

**Lane 1 :** PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

**Lane 2 :** SH-SY5Y (Human neuroblastoma from bone marrow cells) whole cell lysate

**Lane 3 :** HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

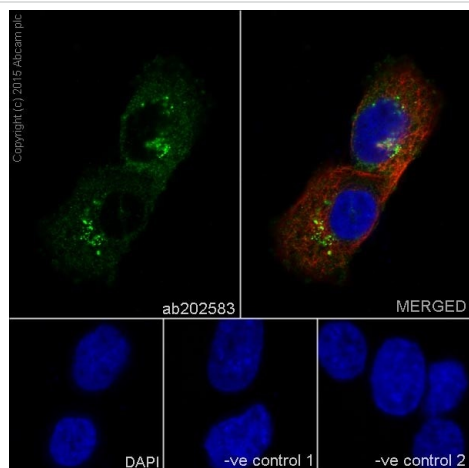
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/1000 dilution

**Predicted band size:** 12 kDa

**Observed band size:** 12 kDa

**Exposure time:** 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



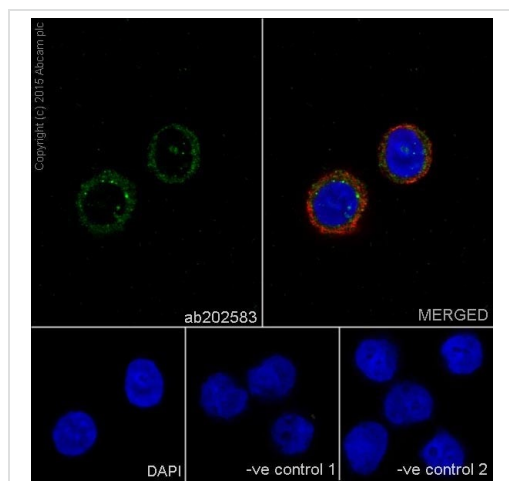
Immunocytochemistry/ Immunofluorescence - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SH-SY5Y (Human neuroblastoma from bone marrow cells) cells labeling TCTEX-1 with ab202583 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/500 dilution (green). Confocal image showing cytoplasmic staining on SH-SY5Y cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with [ab7291](#) (anti-Tubulin mouse mAb) at 1/1000 dilution and [ab150120](#) (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab202583 at 1/500 dilution followed by [ab150120](#) (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2: [ab7291](#) (anti-Tubulin mouse mAb) at 1/1000 dilution followed by [ab150077](#) (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HT-29 (Human colorectal adenocarcinoma cells) cells labeling TCTEX-1 with ab202583 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/500 dilution (green). Confocal image showing cytoplasmic staining on HT-29 cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with [ab7291](#) (anti-Tubulin mouse mAb) at 1/1000 dilution and [ab150120](#) (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

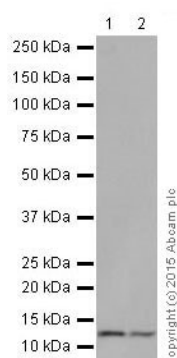
-ve control 1: ab202583 at 1/500 dilution followed by [ab150120](#)

(AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.

-ve control 2: [ab7291](#) (anti-Tubulin mouse mAb) at 1/1000 dilution

followed by [ab150077](#) (Alexa Fluor®488 Goat Anti-Rabbit IgG

H&L) at 1/500 dilution.



Western blot - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

**All lanes** : Anti-TCTEX-1 antibody [EPR17294] (ab202583) at 1/2000 dilution

**Lane 1** : RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate

**Lane 2** : NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

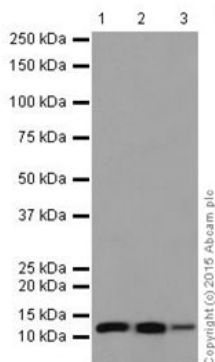
**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/1000 dilution

**Predicted band size:** 12 kDa

**Observed band size:** 12 kDa

**Exposure time:** 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

**All lanes :** Anti-TCTEX-1 antibody [EPR17294] (ab202583) at 1/2000 dilution

**Lane 1 :** Human fetal brain lysate

**Lane 2 :** Human fetal heart lysate

**Lane 3 :** Human fetal spleen lysate

Lysates/proteins at 10 µg per lane.

### Secondary

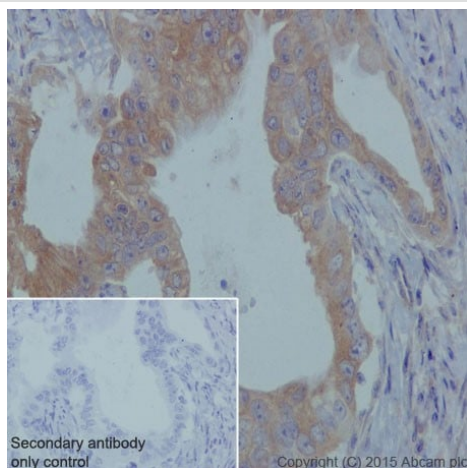
**All lanes :** Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

**Predicted band size:** 12 kDa

**Observed band size:** 12 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

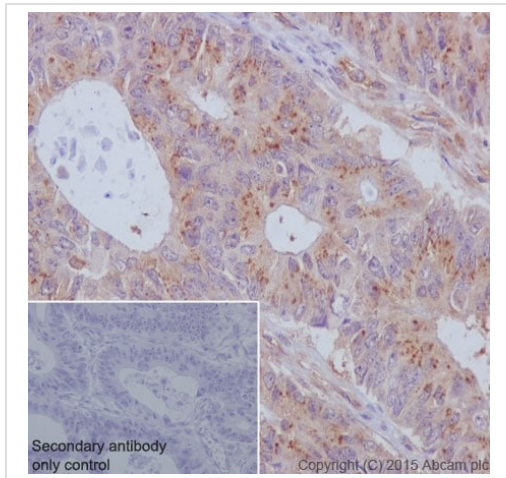


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

Immunohistochemical analysis of paraffin-embedded Human cervix carcinoma tissue labeling TCTEX-1 with ab202583 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) secondary antibody at 1/500 dilution. Cytoplasmic staining on Human cervix carcinoma tissue 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) ([ab97051](#)) at 1/500 dilution.

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

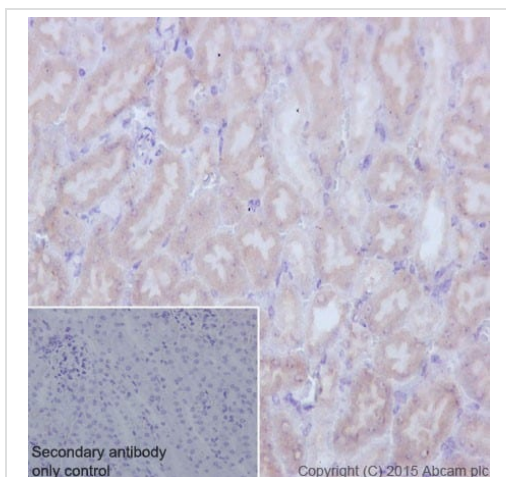


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

Immunohistochemical analysis of paraffin-embedded Human colonic carcinoma tissue labeling TCTEX-1 with ab202583 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) secondary antibody at 1/500 dilution. Cytoplasmic staining on Human colonic carcinoma tissue 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) ([ab97051](#)) at 1/500 dilution.

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

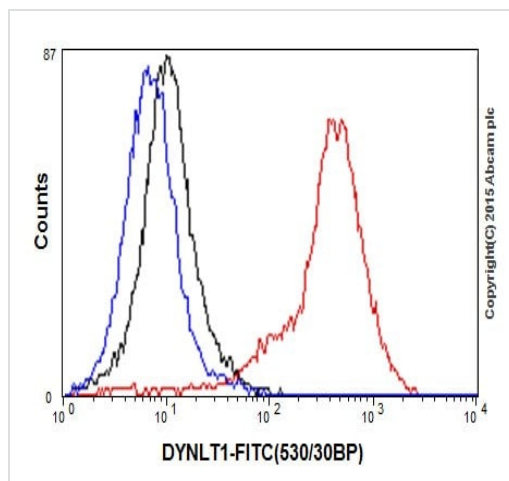


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue labeling TCTEX-1 with ab202583 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) secondary antibody at 1/500 dilution. Cytoplasmic staining on mouse kidney tissue is observed. Counter stained with Hematoxylin.

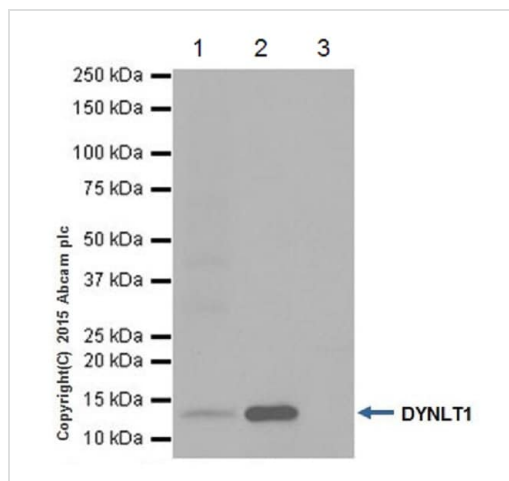
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

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



Flow Cytometry (Intracellular) - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling TCTEX-1 with ab202583 at 1/150 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-TCTEX-1 antibody [EPR17294] (ab202583)

TCTEX-1 was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate with ab202583 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab202583 at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: HeLa whole cell lysate 10 µg (Input). Lane 2: ab202583 IP in HeLa whole cell lysate. Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab202583 in HeLa whole cell lysate.

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

Exposure time: 1 second.



### 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-TCTEX-1 antibody [EPR17294] (ab202583)

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

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