## abcam

### Product datasheet

# Anti-gamma Tubulin antibody [4D11] - C-terminal ab173831

1 References 4 Images

Overview

Product name Anti-gamma Tubulin antibody [4D11] - C-terminal

**Description** Mouse monoclonal [4D11] to gamma Tubulin - C-terminal

Host species Mouse

Tested applications Suitable for: WB, ICC/IF, IHC-P

Species reactivity Reacts with: Mouse, Human, African green monkey

Immunogen Recombinant fragment within Human gamma Tubulin aa 437-451 (C terminal). The exact

sequence is proprietary.

Sequence:

**AATRPDYISWGTQEQ** 

Database link: P23258

Run BLAST with
Run BLAST with

Positive control Human breast carcinoma and colon tissues; HeLa and U2OS cells; HeLa, HepG2, U2OS and

K562 cell lysates; mouse 3T3L1 and spleen lysates; monkey COS7 cell lysate.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**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 Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 99% PBS

Purity Protein G purified

1

**Clonality** Monoclonal

Clone number 4D11 lsotype lgG2b

#### **Applications**

#### The Abpromise guarantee

Our Abpromise guarantee covers the use of ab173831 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
WB		1/1000. Predicted molecular weight: 51 kDa.
ICC/IF		1/50.
IHC-P		1/20 - 1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

#### **Target**

**Function** 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.

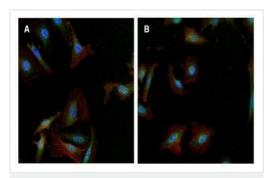
**Sequence similarities** Belongs to the tubulin family.

Post-translational modifications

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.

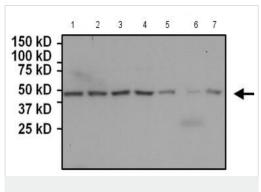
**Cellular localization** Cytoplasm > cytoskeleton > centrosome.

#### **Images**



Immunocytochemistry/ Immunofluorescence - Antigamma Tubulin antibody [4D11] - C-terminal (ab173831)

Immunofluorescence analysis of formalin-fixed, permeabilized A) HeLa cells and B) U2OS, labeling gamma Tubulin (green) using ab173831 at a 1/50 dilution. Cells were washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. F-Actin (red) was stained with DyLight 547 Phalloidin and nuclei (blue) were stained with Hoechst 33342 dye.



Western blot - Anti-gamma Tubulin antibody [4D11] - C-terminal (ab173831)

**All lanes :** Anti-gamma Tubulin antibody [4D11] - C-terminal (ab173831) at 1/1000 dilution

Lane 1: HeLa cell lysate

Lane 2: HepG2 cell lysate

Lane 3: U2OS cell lysate

Lane 4: K562 cell lysate

Lane 5: mouse 3T3L1 cell lysate

Lane 6: mouse spleen lysate

Lane 7: monkey COS7 cell lysate

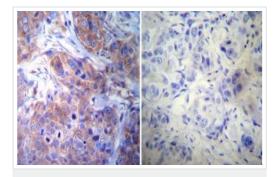
Lysates/proteins at 50 µg per lane.

#### **Secondary**

All lanes: goat anti-mouse-HRP at 1/20000 dilution

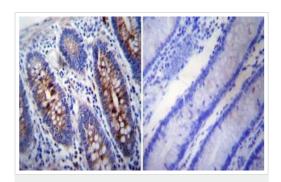
Developed using the ECL technique.

Predicted band size: 51 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-gamma Tubulin antibody [4D11] - C-terminal (ab173831)

Immunohistochemical analysis of Human breast carcinoma tissue, labeling gamma Tubulin with ab173831 at a 1/20 dilution (left panel) or without primary antibody (right panel). To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer, microwaved for 8-15 minutes. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-gamma Tubulin antibody [4D11] - C-terminal (ab173831)

Immunohistochemical analysis of Human colon tissue, labeling gamma Tubulin with ab173831 at a 1/200 dilution (left panel) or without primary antibody (right panel). To expose target proteins, heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer, microwaved for 8-15 minutes. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP, followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- · We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors