



# beta Tubulin Polyclonal Antibody

<b>Product Details</b>		
Size	500 μL	
Species Reactivity	Human, Mouse, Rat	
Published Species	Yeast, Rat, Sheep, Plant, Mouse, Human	
Host/Isotype	Rabbit / IgG	
Class	Polyclonal	
Туре	Antibody	
Conjugate	Unconjugated	
Immunogen	A synthetic peptide derived from aa 416-430 of human tubulin beta	
Form	Liquid	
Concentration	0.09 mg/mL	
Purification	Affinity chromatography	
Storage buffer	PBS, pH 7.6, with 1% BSA	
Contains	0.1% sodium azide	
Storage conditions	-20° C, Avoid Freeze/Thaw Cycles	
RRID	AB_10986058	

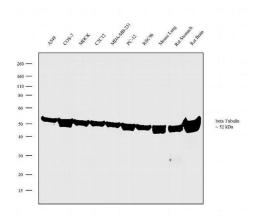
Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	14 Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	1:200	-
Immunocytochemistry (ICC/IF)	1 μg/mL	3 Publications

#### **Product Specific Information**

PA5-16863 targets Tubulin Beta in IHC (P), WB, and IP applications and shows reactivity with Amphibian, Bovine, Chicken, Fungi, Gerbil, Guinea Pig, Human, mouse, Porcine, Rat, Sea Urchin, and Yeast samples.

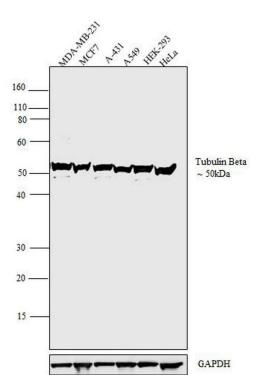
The PA5-16863 immunogen is a synthetic peptide derived from aa 416-430 of human tubulin beta.

## **Product Images For beta Tubulin Polyclonal Antibody**



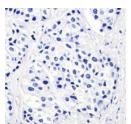
#### beta Tubulin Antibody (PA5-16863) in WB

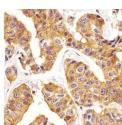
Western blot analysis was performed on whole cell extracts (30µg lysate) of A549 (Lane 1), COS-7 (Lane 2), MDCK (Lane 3), C2C12 (Lane 4), MDA-MB-231 (Lane 5) PC-12 (Lane 6), RSC96 (Lane 7), tissue extracts of Mouse Lung (Lane 8), Rat Stomach (Lane 9) and Rat Brain (Lane 10). The blot was probed with Anti-beta Tubulin Rabbit Polyclonal Antibody (Product # PA5-16863, 1:1000 dilution) and detected by chemiluminescence using Goat anti-Rabbit IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A28177, 0.25µg/mL, 1:4000 dilution). A 52 kDa band corresponding to beta Tubulin was observed across the cell lines and tissues tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock™ Electrophoresis System (Product # El0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



#### beta Tubulin Antibody (PA5-16863) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of MDA-MB-231 (Lane 1), MCF-7 (Lane 2), A431 (Lane 3), A549 (Lane 4), HEK 293 (Lane 5) and HeLa (Lane6). The blots were probed with Anti-Tubulin Beta Rabbit Polyclonal Antibody (Product # PA5-16863, 1:1000 dilution) and detected by chemiluminescence Goat Anti-Rabbit IgG (H+L) Secondary Antibody, HRP conjµgate (Product # G-21234, 1:5000 dilution). A 50 kDa band corresponding to Tubulin was observed across cell lines tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 12 % Bis-Tris gel (Product # NP0341BOX), XCell SureLock™ Electrophoresis System (Product # El0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).





#### beta Tubulin Antibody (PA5-16863) in IHC (P)

Immunohistochemistry analysis of Tubulin Beta showing staining in the cytoplasm of paraffin-embedded human breast carcinoma (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a Tubulin Beta Rabbit Polyclonal Antibody (Product # PA5-16863) diluted in 3% BSA-PBS at a dilution of 1:20 for 1 hour at 37°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

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#### □ 18 References

# Western Blot (14)

Molecular cell

Unresolved stalled ribosome complexes restrict cell-cycle progression after genotoxic stress.

"PA5-16863 was used in Western Blotting to show that ribosome stalling activates cell-cycel arrest, which may be prolonged due to inadequate functioning of ASCC to resolve the stalled ribosomes."

Authors: Stoneley M,Harvey RF,Mulroney TE,Mordue R,Jukes-Jones R,Cain K,Lilley KS,Sawarkar R,Willis AE

**Year** 2022

Species Mouse

International journal of molecular sciences

The Gastroprotective Effect of Naringenin against Ethanol-Induced Gastric Ulcers in Mice through Inhibiting Oxidative and Inflammatory Responses.

"Published figure using beta Tubulin polyclonal antibody (Product # PA5-16863) in Western Blot" Authors: Li WS,Lin SC,Chu CH,Chang YK,Zhang X,Lin CC,Tung YT

**Year** 2021

Species Human

View more WB references on thermofisher.com

## Immunohistochemistry (1)

Plant biotechnology journal

CTP synthase is essential for early endosperm development by regulating nuclei spacing.

"PA5-16863 was used in Immunohistochemistry to identify the rice mutant endospermless 2 which shows defects in the early stages of endosperm development."

 $Authors: Yoon J, Cho\ LH, Kim\ SR, Tun\ W, Peng\ X, Pasriga\ R, Moon\ S, Hong\ WJ, Ji\ H, Jung\ KH, Jeon\ JS, An\ G$ 

**Year** 2021

Species Plant

Dilution 1:50

# Immunocytochemistry (3)

International journal of molecular medicine

Study of the cytological features of bone marrow mesenchymal stem cells from patients with neuromyelitis optica.

"PA5-16863 was used in Western Blotting to compare the proliferation, differentiation and senescence of bone marrowderived mesenchymal stem cells from patients with Neuromyelitis optica with that of age- and sex-matched healthy subjects."

Authors: Yang C, Yang Y, Ma L, Zhang GX, Shi FD, Yan Y, Chang G

**Year** 2019

Species Human

Dilution 1:100

View more ICC/IF references on thermofisher.com

# More applications with references on thermofisher.com

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