beta Tubulin Monoclonal Antibody (2 28 33)

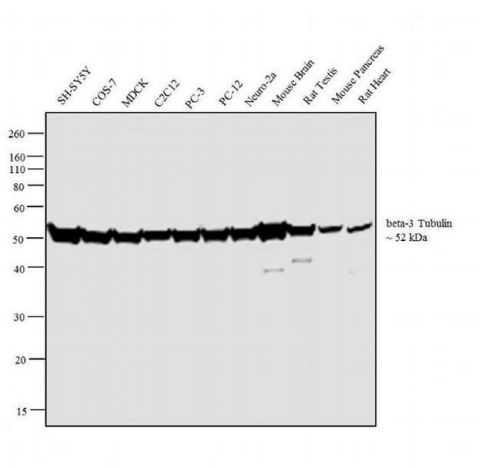
Product Details	
Size	100 µg
Species Reactivity	Dog, C. elegans, Human, Mouse, Non-human primate, Rat
Published Species	Dog, Pig, C. elegans, Rat, Non-human primate, Zebrafish, Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	2 28 33
Conjugate	Unconjugated
Immunogen	Beta-tubulin from sea urchin (S. purpuratus) sperm.
Form	Liquid
Concentration	0.5 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4
Contains	0.1% sodium azide
Storage conditions	-20°C
RRID	AB_2533072

Applications	Tested Dilution	Publications
Western Blot (WB)	1-3 µg/mL	70 Publications
Immunohistochemistry (IHC)	-	4 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunohistochemistry - Free Floating (IHC (Free))	-	0 Publication
Immunocytochemistry (ICC/IF)	1-3 µg/mL	12 Publications
Flow Cytometry (Flow)	-	1 Publication
Immunoprecipitation (IP)	-	2 Publications
Miscellaneous PubMed (Misc)	-	6 Publications

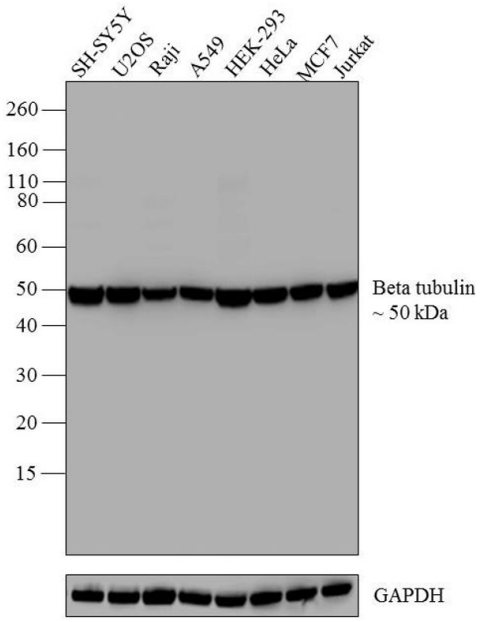
Product Specific Information

This antibody reacts with the ~50 kDa beta-tubulin and has been shown to bind to the two major and one of the minor beta-tubulin isotypes. Reactivity has been confirmed with mouse NIH3T3 fibroblast cells, rat brain, and mouse testis.

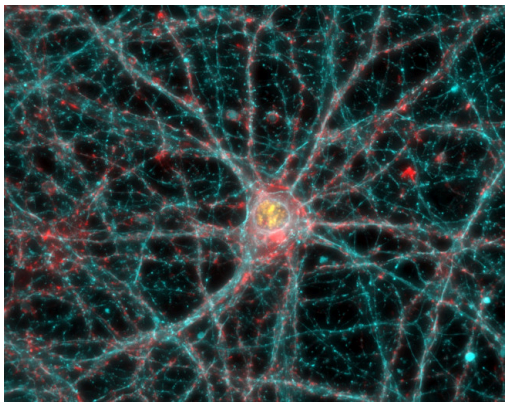
Product Images For beta Tubulin Monoclonal Antibody (2 28 33)



beta Tubulin Antibody (32-2600) in WB
Western blot analysis was performed on whole cell extracts (30µg lysate) of SH-SY5Y (Lane 1), COS-7 (Lane 2), MDCK (Lane 3), C2C12 (Lane 4), PC-3 (Lane 5), PC-12 (Lane 6), Neuro-2a (Lane 7) tissue extracts of Mouse Brain (Lane 8), Rat Testis (Lane 9), Mouse Pancreas (Lane 10) and Rat Heart (Lane 11). The blot was probed with Anti-beta-3 Tubulin Mouse Monoclonal Antibody (Product # 32-2600, 2µg/mL) and detected by chemiluminescence using Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate (Product # A28177, 0.25µg/mL, 1:4000 dilution). A 52 kDa band corresponding to beta-3 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 # NP0322BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) 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 (32-2600) in WB
Western blot analysis of Beta-Tubulin was performed by loading 20 µg of SH-SY5Y (lane1), U2OS (lane2), Raji (lane3), A549 (lane4), HEK-293 (lane5), HeLa (lane6), MCF7 (lane 7) and Jurkat (lane8) cell lysate using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock Electrophoresis System (Product # EI0002), Novex® Sharp Pre-Stained Protein Standard (LC5800), and iBlot® Dry Blotting System (IB21001). Proteins were transferred to a nitrocellulose membrane and blocked with 5 % skim milk for 1 hour at room temperature. Beta-Tubulin was detected at ~50 kDa using Beta-Tubulin Mouse Monoclonal Antibody (Product # 32-2600) at 0.5-1 µg/mL in 2.5 % skim milk at 4° C overnight on a rocking platform. Goat Anti-Mouse IgG - HRP Secondary Antibody (Product # 62-6520) at 1:4000 dilution was used and chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



beta Tubulin Antibody (32-2600) in ICC/IF
Visualizing a rat cortical neuron culture. Cryopreserved Gibco™ Primary Mouse Cortical Neurons (Product # A15585) were grown in culture for 3 weeks using the Gibco™ B-27™ Plus Neuronal Culture System (Product # A3653401). Cells were fixed and labeled with Invitrogen™ NucBlue™ Fixed Cell ReadyProbes™ Reagent (Product # R37606), anti--3 tubulin mouse monoclonal antibody (Product # 32-2600) in conjunction with Invitrogen™ Alexa Fluor™ 488 goat anti-mouse IgG antibody (Product # A-11029), and Invitrogen™ ActinRed™ 555 ReadyProbes™ Reagent (Product # R37112). Cells were mounted in Invitrogen™ ProLong™ Glass Antifade Mountant (Product # P36980) and imaged on an Invitrogen™ EVOS™ FL Auto 2 Imaging System using a 60x oil-immersion objective.

View more figures on thermofisher.com

96 References

Western Blot (70)

Nature communications

Dominant ARF3 variants disrupt Golgi integrity and cause a neurodevelopmental disorder recapitulated in zebrafish.

"32-2600 was used in Western Blotting to report that de novo missense variants in ARF3, encoding a small GTPase regulating Golgi dynamics, cause a developmental disease in humans impairing nervous system and skeletal formation."

Authors: Fasano G,Muto V,Radio FC,Venditti M,Mosaddeghzadeh N,Coppola S,Paradisi G,Zara E,Bazgir F,Ziegler A, Chillemi G,Bertuccini L,Tinari A,Vetro A,Pantaleoni F,Pizzi S,Conti LA,Petrini S,Bruselles A,Prandi IG,Mancini C, Chandramouli B,Barth M,Bris C,Milani D,Selicorni A,Macchiaiolo M,Gonfiantini MV,Bartuli A,Mariani R,Curry CJ, Guerrini R,Slavotinek A,Iascone M,Dallapiccola B,Ahmadian MR,Lauri A,Tartaglia M

Year 2022

Species Zebrafish

Dilution 1:1000

Scientific reports

Picomolar fluorescent probes for compound affinity determination to carbonic anhydrase IX expressed in live cancer cells.

"32-2600 was used in Western Blotting to investigate a series of high affinity and high selectivity fluorescein-labeled compounds targeting carbonic anhydrase IX (CAIX) to visualize and quantify CAIX expression in cancer cells."

Authors: Matulien J,Žvinys G,Petrauskas V,Kvietkauskait A,Zakšauskas A,Shubin K,Zubrien A,Baranauskien L, Kaenauskait L,Kopanchuk S,Veiksina S,Paketuryt-Latv V,Smirnovien J,Juozapaitien V,Mickeviit A,Michailovien V, Jachno J,Stravinskien D,Sližien A,Petrošit A,Becker HM,Kazokait-Adomaitien J,Yaromina A,apkauskait E,Rinken A, Dudutien V,Dubois LJ,Matulis D

Year 2022

Species Human

Dilution 1:2000

View more WB references on thermofisher.com

Immunohistochemistry (4)

Scientific reports

Establishment and characterization of human pluripotent stem cells-derived brain organoids to model cerebellar diseases.

"32-2600 was used in Immunohistochemistry-immunofluorescence to indicate that the established organoids recapitulate important characteristics of human brain development and exhibit cerebellar features, constituting a resourceful tool for testing therapeutic approaches for cerebellar diseases."

Authors: Brás J,Henriques D,Moreira R,Santana MM,Silva-Pedrosa R,Adão D,Braz S,Álvaro AR,de Almeida LP, Mendonça LS

Year 2022

Species Human

Dilution 1:500

PloS one

Vps35-deficiency impairs SLC4A11 trafficking and promotes corneal dystrophy.

"32-2600 was used in Immunohistochemistry-immunofluorescence to provide evidence for a critical role of Vps35 in mouse corneal dystrophy."

Authors: Liu W,Tang FL,Lin S,Zhao K,Mei L,Ye J,Xiong WC

Year 2017

Species Mouse

Dilution 1:1,000

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

IHC (F) (1) **ICC/IF (12)** **Flow (1)** **IP (2)** **Misc (6)**