

For Research Use Only

TUBB3-specific/TUJ1 Monoclonal antibody, PBS Only

Catalog Number: 66375-1-PBS

Featured Product



Basic Information

Catalog Number:

66375-1-PBS

Concentration:

1mg/ml

Source:

Mouse

Isotype:

IgG1

GenBank Accession Number:

NM_001197181

GeneID (NCBI):

10381

UNIPROT ID:

Q13509

Full Name:

tubulin, beta 3

Calculated MW:

55 kDa

Observed MW:

50-55 kDa

Purification Method:

Protein G purification

CloneNo.:

1F8G10

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, IF-Fro, FC (Intra), IP, ELISA

Species Specificity:

human, mouse, rat, pig, rabbit, chicken

Background Information

TUBB3, the class III β tubulin or Tuj1, is selectively expressed in testis and neurons of the central and peripheral nervous system. It has been widely used as a marker for neurons. Aberrant expression of TUBB3 has also been found in various tumors of non-neural origin and can be used as a biomarker for cancer aggressiveness and a marker for the tendency to respond poorly to chemotherapy. This antibody is specific to TUBB3 but not cross-react with other tubulin isoforms.

Storage

Storage:

Store at -80°C .

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS only, pH7.3

For technical support and original validation data for this product please contact:

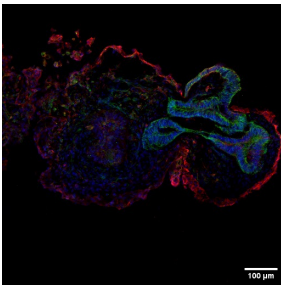
T: 4006900926

E: Proteintech-CN@ptglab.com

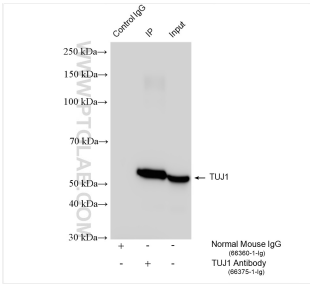
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

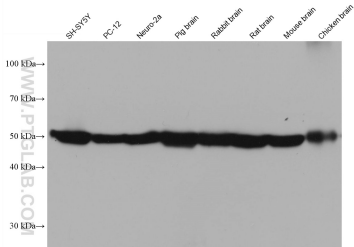
Selected Validation Data



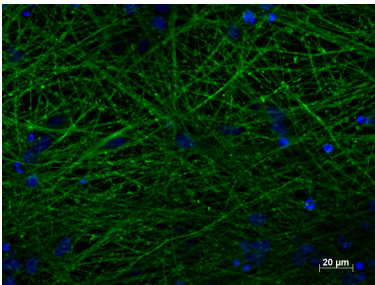
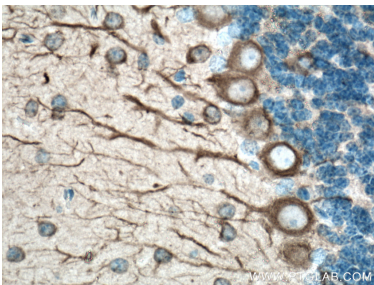
Retinal organoids (day 60) generated from human induced pluripotent stem cells (iPSCs) and fixed with 4% PFA. Stained for Tubulin beta 3/TUJ1 using 66375-1-Ig at 1:500 dilution (green) and Cytokeratin 19 using 10712-1-AP at 1:200 (red). Nuclear stain DAPI (blue). Scale bar = 100 μm. Data generated by Alessandro Bellapianta at Johannes Kepler Universitat, Austria. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



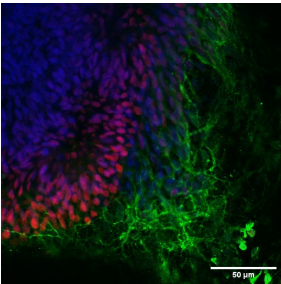
IP result of anti-TUBB3-specific/TUJ1 (IP:66375-1-Ig, 4ug; Detection:66375-1-Ig 1:10000) with SH-SY5Y cells lysate 1240 ug. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



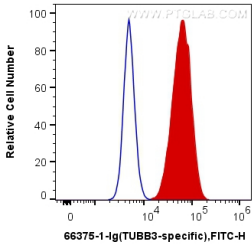
Various lysates were subjected to SDS PAGE followed by western blot with 66375-1-Ig (TUBB3-specific antibody) at dilution of 1:49000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



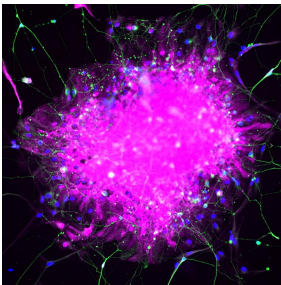
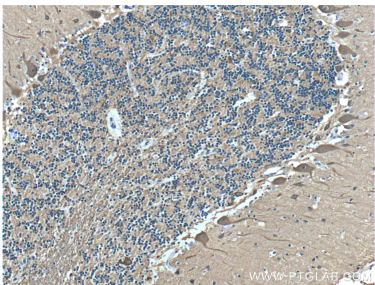
Immunofluorescent staining of TUBB3 (66375-1-Ig, 1:250) with 4% PFA fixed control hiPSC derived neuronal cultures (35 days old). (Green: TUBB3; Blue: DAPI). Provided by BioTalentum Ltd., Hungary. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



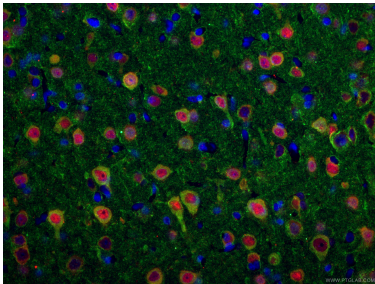
Retinal organoids (day 30) generated from human induced pluripotent stem cells (iPSCs) and fixed with 4% PFA. Stained for Tubulin beta 3/TUJ1 using 66375-1-Ig at 1:500 dilution (green) and PAX6 (12323-1-AP) at 1:500. Nuclear stain DAPI (blue). Scale bar = 50 μm. Data generated by Alessandro Bellapianta at Johannes Kepler Universitat, Austria. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



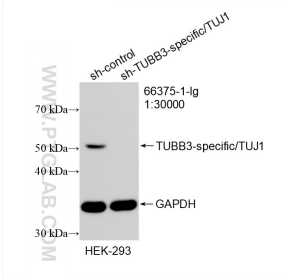
1X10⁶ SH-SY5Y cells were intracellularly stained with 0.2 ug Anti-Human TUBB3-specific (66375-1-Ig, Clone:1F8G10) and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



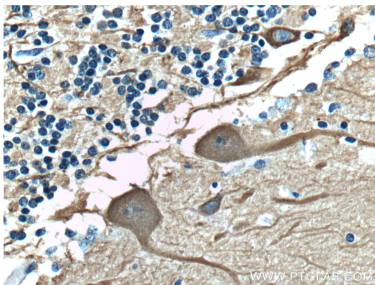
Immunofluorescence analysis of human pluripotent stem cell-derived astrocytes with S100β (15146-1-AP) at 1/200 (Magenta) and neurons with TUJ1 (66375-1-Ig) at 1:500 (Green). The sample was fixed with 4% Paraformaldehyde and permeabilized with 0.3% Triton X-100. Alexa Fluor 488-conjugated goat anti-mouse IgG (1/500) and Alexa Fluor 594-conjugated goat anti-rabbit IgG (1/500) were used as the secondary antibodies. Nuclei were counterstained with DAPI (blue). Scale bar = 20 μm.



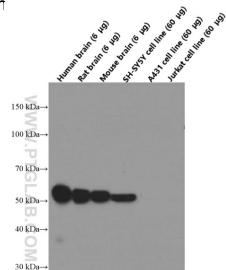
Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using 66375-1-Ig (TUBB3-specific antibody), at dilution of 1:200 and Coralite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). The section was co-stained with 26975-1-AP (NeuN antibody, red). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



WB result of TUBB3-specific/TUJ1 antibody (66375-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-TUBB3-specific/TUJ1 transfected HEK-293 cells. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.

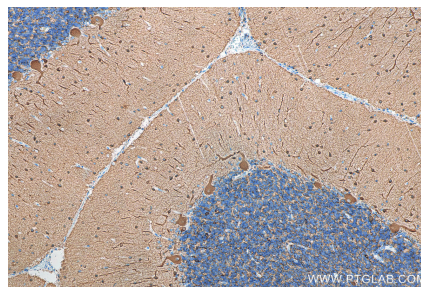


Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66375-1-Ig (TUBB3-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation



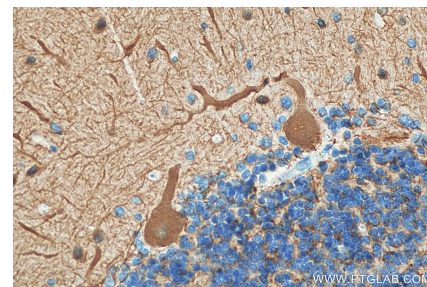
Western blot analysis of TUBB3 in various tissues and cell lines with 66375-1-Ig (TUBB3-specific Antibody) at dilution of 1:40,000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.

Immunohistochemical analysis of paraffin-embedded human cerebellum tissue slide using 66375-1-Ig (TUBB3-specific Antibody) at dilution of 1:400 (under 10x lens). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.

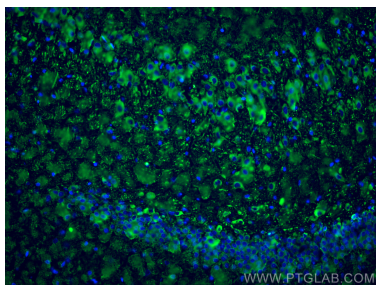


Immunohistochemical analysis of paraffin-embedded human cerebellum tissue slide using 66375-1-Ig (TUBB3-specific antibody) at dilution of 1:20000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.

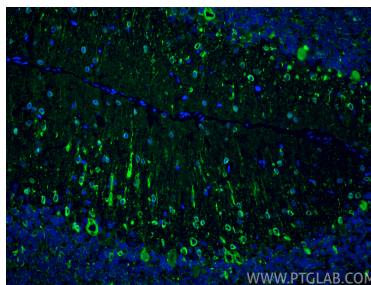
Immunohistochemical analysis of paraffin-embedded human cerebellum tissue slide using 66375-1-Ig (TUBB3-specific Antibody) at dilution of 1:400 (under 40x lens). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human cerebellum tissue slide using 66375-1-Ig (TUBB3-specific antibody) at dilution of 1:20000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded rat brain tissue using TUBB3-specific/TUJ1 antibody (66375-1-Ig, Clone: 1F8G10) at dilution of 1:800 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded rat cerebellum tissue using TUBB3-specific/TUJ1 antibody (66375-1-Ig, Clone: 1F8G10) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.