

For Research Use Only

TUBB3-specific Monoclonal antibody, PBS Only



Catalog Number: 66375-1-PBS

Basic Information

Catalog Number: 66375-1-PBS	GenBank Accession Number: NM_001197181	Purification Method: Protein G purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 10381	CloneNo.: 1F8G10
Source: Mouse	Full Name: tubulin, beta 3	
Isotype: IgG1	Calculated MW: 55 kDa	
	Observed MW: 50-55 kDa	

Applications

Tested Applications:
WB, IF, FC, IHC, ELISA

Species Specificity:
human, mouse, rat, rabbit, chicken, pig

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 -20°C . Stable for one year after shipment.

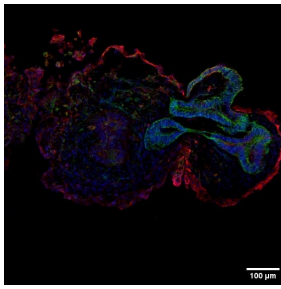
Storage Buffer:
PBS only

Aliquoting is unnecessary for -20°C storage

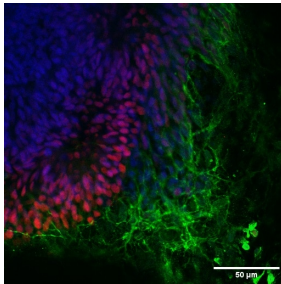
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com
W: ptglab.com

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

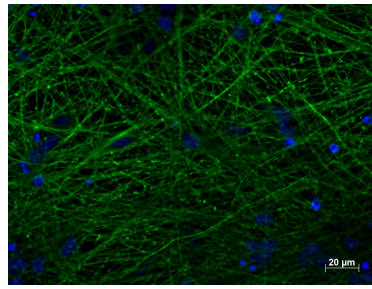
Selected Validation Data



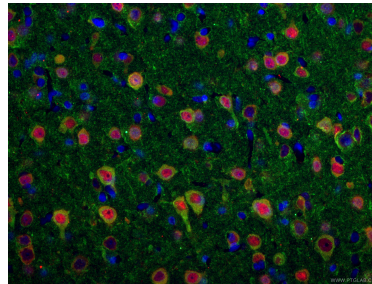
Retinal organoids (day 60) generated from human induced pluripotent stem cells (iPSCs) and fixed with 4% PFA. Stained for Tubulin beta 3/TUJ1 using 66375-1-Ig at 1:500 dilution (green) and Cytokeratin 19 using 10712-1-AP at 1:200 (red). Nuclear stain DAPI (blue). Scale bar = 100 μm. Data generated by 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.



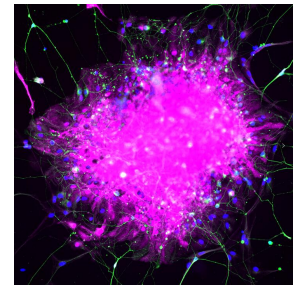
Retinal organoids (day 30) generated from human induced pluripotent stem cells (iPSCs) and fixed with 4% PFA. Stained for Tubulin beta 3/TUJ1 using 66375-1-Ig at 1:500 dilution (green) and PAX6 (12323-1-AP) at 1:500. Nuclear stain DAPI (blue). Scale bar = 50 μm. Data generated by Alessandro Bellapianta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



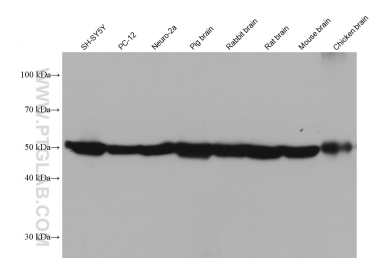
Immunofluorescent staining of TUBB3 (66375-1-Ig, 1:250) with 4% PFA fixed control hiPSC derived neuronal cultures (35 days old). (Green: TUBB3; Blue: DAPI). Provided by BioTalentum Ltd., Hungary. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



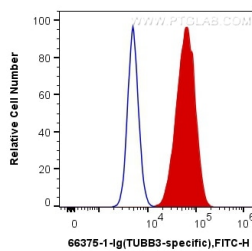
Immunofluorescent analysis of (4% PFA) fixed rat brain tissue using 66375-1-Ig (TUBB3-specific antibody), at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). The section was co-stained with 26975-1-AP (NeuN antibody, red). This data was developed using the same antibody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



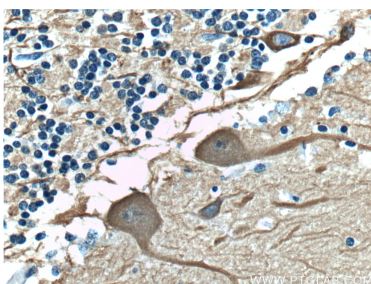
Immunofluorescence analysis of human pluripotent stem cell-derived astrocytes with S100β (15146-1-AP) at 1/200 (Magenta) and neurons with TUJ1 (66375-1-Ig) at 1:500 (Green). The sample was fixed with 4% Paraformaldehyde and permeabilized with 0.3% Triton X-100. Alexa Fluor 488-conjugated goat anti-mouse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



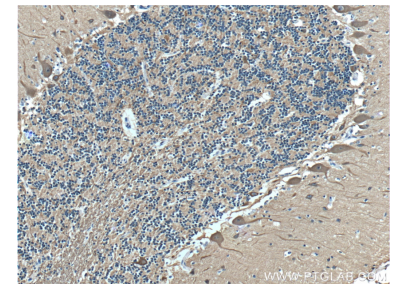
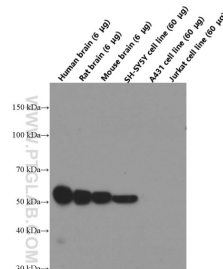
Various lysates were subjected to SDS PAGE followed by western blot with 66375-1-Ig (TUBB3-specific antibody) at dilution of 1:49000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



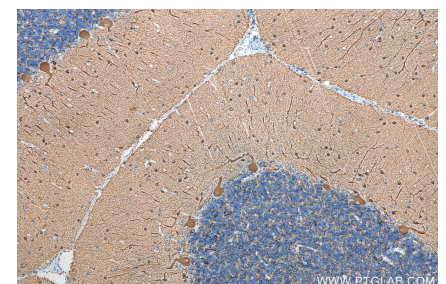
1x10⁶ SH-SY5Y cells were intracellularly stained with 0.2 ug Anti-Human TUBB3-specific (66375-1-Ig, Clone:1F8G10) and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 66375-1-PBS in a different storage buffer formulation.



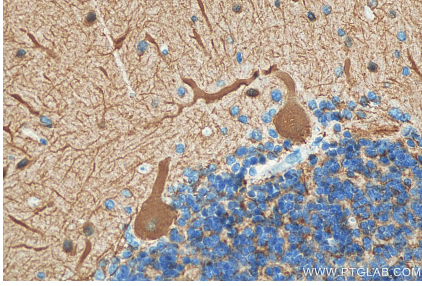
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66375-1-Ig (TUBB3-specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66375-1-PBS in a different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



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 1:400 (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.

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 1:20000 (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.