bsm-33177M **[Primary Antibody]**

TUBB3 (Neuronal Marker) Mouse mAb

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DATASHEET

Host: Mouse
Isotype: IgG
Clonality: Monoclonal
CloneNo.: 6F12
GeneID: 10381
SWISS: Q13509
Target: TUBB3 (Neuronal Marker)
Purification: affinity purified by Protein G
Concentration: 1mg/ml
Storage: Size : 50ul/100ul/200ul/500ul
0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Size : 200ug (PBS only)
0.01M PBS
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Neuronal Marker
Beta III tubulin is abundant in the central and peripheral nervous systems (CNS and PNS) where it is prominently expressed during fetal and postnatal development. As exemplified in cerebellar and sympathoadrenal neurogenesis, the distribution of beta III is neuron-associated, exhibiting distinct temporospatial gradients according to the regional neuroepithelia of origin. However, transient expression of this protein is also present in the subventricular zones of the CNS comprising putative neuronal- and/or glial precursor cells, as well as in Kulchitsky neuroendocrine cells of the fetal respiratory epithelium. This temporally restricted, potentially non-neuronal expression may have implications in the identification of presumptive neurons derived from embryonic stem cells.

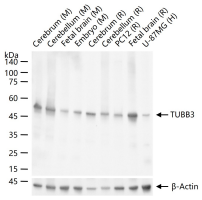
Applications: **WB** (1:1000-10000)
IHC-P (1:200-1000)
IHC-F (1:200-1000)
IF (1:200-1000)
Flow-Cyt (1μg/Test)

Reactivity: Human, Mouse, Rat

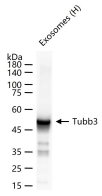
Predicted MW.: 50 kDa

Subcellular Location: Cytoplasm

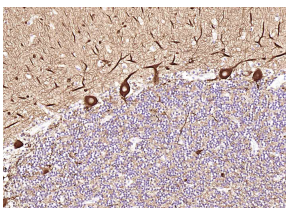
VALIDATION IMAGES



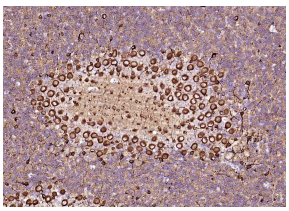
25 ug total protein per lane of various lysates (see on figure) probed with TUBB3 monoclonal antibody, unconjugated (bsm-33177M) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.

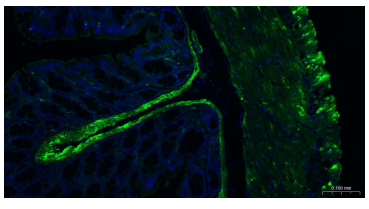


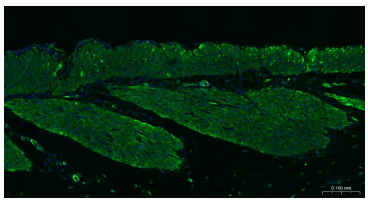
25 ug total protein per lane of various lysates (see on figure) probed with Tubb3 monoclonal antibody, unconjugated (bsm-33177M) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.



Paraformaldehyde-fixed, paraffin embedded (human cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (TUBB3 (Neuronal Marker)) Monoclonal Antibody, Unconjugated (bsm-33177M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.



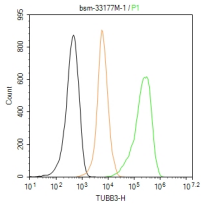




Paraformaldehyde-fixed, paraffin embedded (rat cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (TUBB3 (Neuronal Marker)) Monoclonal Antibody, Unconjugated (bsm-33177M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructionsand DAB staining.

Paraformaldehyde-fixed, paraffin embedded Rat Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with TUBB3 (Neuronal Marker) Monoclonal Antibody, Unconjugated (bsm-33177M) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Mouse IgG antibody (green, bs-0296G-FITC), DAPI (blue, C02-04002) was used to stain the cell nuclei.

Paraformaldehyde-fixed, paraffin embedded Rat Stomach; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with TUBB3 (Neuronal Marker) Monoclonal Antibody, Unconjugated (bsm-33177M) at 1:200 overnight at 4°C. Followed by conjugated Goat Anti-Mouse IgG antibody (green, bs-0296G-FITC), DAPI (blue, C02-04002) was used to stain the cell nuclei.



The U-87MG (H) cells were fixed with 4% PFA (10 min at r.t.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C,the cells then were incubated in 5%BSA to block non-specific protein-protein interactions (30 min at r.t.), followed by secondary antibody incubation for 40 min at room temperature. Primary Antibody (green):Mouse Anti-TUBB3 antibody (bsm-33177M): 1 µg/10^6 cells; Isotype Control (orange): Mouse IgG (bs-0296P). Blank control (black): PBS. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=12.7]** Fangyu Qiao. et al. Growth factor collected cell membrane-functionalized matrix for vascular-innervated bone regeneration. COMPOSITES PART B-ENGINEERING. 2025 Feb;291:112019 IF ;Rat. 10.1016/j.compositesb.2024.112019
- **[IF=10.317]** Yu D et al. MOF-encapsulated nanozyme enhanced siRNA combo: Control neural stem cell differentiation and ameliorate cognitive impairments in Alzheimer's disease model. Biomaterials . 2020 Oct;255:120160. IF,ICC ;Rat&Mouse. 32540758
- **[IF=7.1]** Dai Nan. et al. DVL/GSK3/ISL1 pathway signaling: unraveling the mechanism of SIRT3 in neurogenesis and AD therapy. STEM CELL RES THER. 2024 Dec;15(1):1-18 ICC ;Mouse. 39267160
- **[IF=5.923]** Bing-Chun Liu. et al. Global Transcriptional Analyses of the Wnt-Induced Development of Neural Stem Cells from Human Pluripotent Stem Cells. Int J Mol Sci. 2021 Jan;22(14):7473 ICC ;Human. 34299091
- **[IF=3.046]** Yuyuan Ma. et al. Ultra-structural morphology analysis of human cranial bone marrow mesenchymal stromal cells during neural differentiation. Neurosci Lett. 2021 Aug;:136179 ICC ;Human. 34416344