Human β-I Tubulin Antibody

Monoclonal Mouse IgG_{2B} Clone # 923425

Catalog Number: MAB8527

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human β-I Tubulin in direct ELISAs.
Source	Monoclonal Mouse IgG_{2B} Clone # 923425
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human β-I Tubulin Met1-His451 Accession # Q9H4B7
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

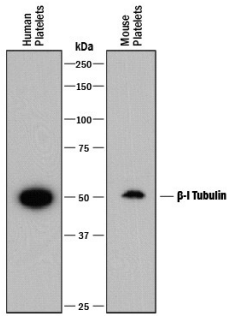
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

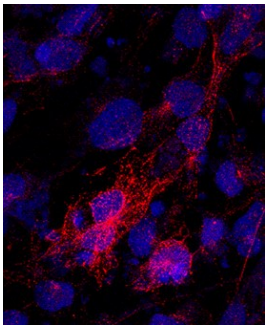
DATA

Western Blot



Detection of Human and Mouse β-I Tubulin by Western Blot. Western blot shows lysates of human platelets and mouse platelets. PVDF membrane was probed with 0.2 µg/mL of Mouse Anti-Human β-I Tubulin Monoclonal Antibody (Catalog # MAB8527) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for β-I Tubulin at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



β-I Tubulin in BG01V Human Embryonic Stem Cells. β-I Tubulin was detected in immersion fixed BG01V human embryonic stem cells differentiated into cardiomyocytes using Mouse Anti-Human β-I Tubulin Monoclonal Antibody (Catalog # MAB8527) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm and cytoskeleton. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

β-tubulin is a 50 kDa cytoskeletal protein which is the a major component of neuronal processes: axons, dendrites, and dendritic spines. β-tubulin is represented by different isoforms including β-I, β-II, β-III, and β-IV. Elimination of β-I isoform will decrease the viability of neuroblastoma cells. Formation of actin tubules may be directly inhibited by β-I isoform which results in decreasing cellular adhesion. β-I Tubulin levels in different brain regions of schizophrenia patients undergo noticeable changes suggesting that this isoform may have a specific role in the pathophysiology of this illness by affecting actin tubule formation which is required for cell division and differentiation.

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