DATA SHEET

Tubulin-α Ab-2 (Clone DM1A)

Mouse Monoclonal Antibody

Cat. #DLN-09989, DLN-09990 or DLN-09988 (0.1ml, 0.5ml or 1ml at 200µg/ml) (Biotin-Labeled Ab with BSA and Azide)
Cat. #DLN-09992, DLN-09993, or DLN-09991 (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)
Cat. #DLN-09994 or DLN-09995 (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)
Cat. #DLN-09996 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

Description: Microtubules, the major cytoskeletal elements found in all eukaryotic cells, consist of Tubulin, which is a dimer of two 55kDa subunits: α and β. Microtubules play key roles in chromosome segregation in mitosis, intracellular transport, ciliary and flagellar bending, and structural support of the cytoskeleton.

Comments: Ab-2 causes the 10-nm filaments to collapse into large lateral aggregates collecting in the cell periphery or tight juxtanuclear caps.[1] It does not block microtubule assembly.[1] It does not inhibit polymerization or depolymerization of platelet tubulin *in vitro*.[3] It blocks (by 70-80%) the ability of tubulin dimers (with GppNHp bound) to promote a stable inhibition of adenylyl cyclase.[4]

Mol. Wt. of Antigen: 57kDa

Epitope: aa 426-450

Species Reactivity: Human, Cow, Pig, Rat, Mouse, Guinea pig, Gerbil, Frog, Chicken. Others-not known.

Clone Designation: DM1A

Ig Isotype / Light Chain: IgG_1 / κ

Immunogen: Native chick brain microtubules.[1]

Applications and Suggested Dilutions:

- Electron Microscopy[1]
- Immunofluorescence[1]
- Immunoprecipitation (Native and denatured)
  (Use Protein G) (Ab 2µg/mg protein lysate)
- Western Blotting (Ab 1-2µg/ml for 2hrs at RT)[1]
- Immunohistology (Formalin/paraffin)
  (Use Ab 1-2µg/ml for 30 min at RT)

** (No special pretreatment is required for staining of formalin-fixed, paraffin-embedded tissues)

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Ls174T, MAD109 cells. Skin or lung.

Cellular Localization: Cytoplasmic

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Cat. #DLN-09996 (7.0ml) (Ready-to-Use for Immunohistochemical Staining)

Supplied As:

200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml,

or

Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

1. Blose SH, *et. al.* J Cell Biol, 1984, 98:847-58.
2. Breitling F, *et. al.* J Mol Biol, 1986, 189:367-70.
3. Berry S, *et. al.* Biochim Biophys Acta, 1989, 1012:46-56.
4. Roychowdhury S, *et. al.* Biochemistry, 1993, 32:4955-61.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. Dianova is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

For Research Use Only

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