

Monoclonal Antibody to Microtubules - Supernatant

Catalog No.: BM2232

Quantity: 2 ml

Background: Microtubules are intracellular protein structures that serve as structural components within cells. Microtubules mediate many physical cellular processes including cytokinesis, mitosis and vesicular transport. Comprising one of the main components of the cytoskeleton, microtubules demonstrate diameters near 24 nm and lengths ranging from several micrometers to millimeters within axons of some nerve cells. Microtubules are created by polymers of tubulin dimers. Capable of enlarging and contracting for the purpose of generating force, microtubules stimulate and regulate the mitotic spindle used by eukaryotic cells to segregate their chromosomes during cell division. Microtubules also constitute part of the cilia and flagella of eukaryotic cells. In addition, motor proteins aid in cellular movement by advancing along microtubules. Markers for microtubules are useful in the study of function and behavior of these proteins, and can also be used to identify Actin bundles in subcellular fractions.

Host / Isotype: Mouse / IgM

Clone: AE-8

Format: **State:** Liquid Tissue culture Supernatant
Buffer System: RPMI-1640, pH 7.2
Preservatives: 0.09% Sodium Azide

Applications: Can be used to stain microtubules in cell or tissue preparations and can be used to identify Actin Bundles in subcellular fractions.
Works well with paraformaldehyde-fixed frozen tissue or cell preparations and formalin-fixed, paraffin-embedded tissue sections.
Recommended Positive Control: Muscle tissue.
Use this antibody without dilution.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This Monoclonal antibody clone AE-8 recognizes an antigen associated with cytoplasmic Microtubules found in Human cells.
AE-8 stains cytoplasmic microtubules in the cytoplasm of normal and malignant human cells of mesenchymal derivation and can be used as a marker of these organelles in paraformaldehyde fixed or frozen tissue or cell preparations and formalin fixed, paraffin-embedded tissue sections.
Muscle tissue is the recommended positive control tissue.
The mAb can also be used as a marker of microtubules in subcellular fractions.

Species Reactivity: **Tested:** Human.

Storage: Store the antibody undiluted at 2-8°C for one month (or in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings: 1. Epstein, A.L. and Clevenger, C.V., Identification of nuclear antigens in human cells by immunofluorescence, immunoelectron microscopy, and immuno-biochemical methods using monoclonal antibodies. In: Progress on nonhistone protein research, Vol. 1, Isaac Bekhor, ed., 1985, CRC Press, Boca Raton, FL, pp 117-137.