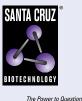
SANTA CRUZ BIOTECHNOLOGY, INC.

Microtubule Marker (AE-8): sc-73551



The Power to Question

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 addtion, 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.

REFERENCES

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- Caviston, J.P. and Holzbaur, E.L. 2006. Microtubule motors at the intersection of trafficking and transport. Trends Cell Biol. 16: 530-537.
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SOURCE

Microtubule Marker (AE-8) is a mouse monoclonal antibody raised against K-562 erythroleukemia cell line of human origin.

PRODUCT

Each vial contains 100 μg lgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Microtubule Marker (AE-8) is recommended for detection of an antigen associated with cytoplasmic microtubules of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

SELECT PRODUCT CITATIONS

- Zimmerman, J.W., et al. 2012. Cancer cell proliferation is inhibited by specific modulation frequencies. Br. J. Cancer 106: 307-313.
- Min, J., et al. 2013. Fluorescent microscopy beyond diffraction limits using speckle illumination and joint support recovery. Sci. Rep. 3: 2075.
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- Moriyama, T., et al. 2021. Intracellular trafficking pathway of albumin in glomerular epithelial cells. Biochem. Biophys. Res. Commun. 574: 97-103.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.