

Mitotic Cells (8B3G): sc-53006

BACKGROUND

The life cycle of a eukaryotic cell consists of various phases including mitosis (M-phase) and synthesis (S-phase). During M-phase the cell divides into two identical daughter cells and chromosome condensation and spindle formation are microscopically visible. In S-phase the DNA of a cell is replicated which can be detected using biochemical techniques. In between the M and S phase two gap phases occur: the G₁-phase, the gap between mitosis and the start of DNA replication, and G₂-phase, the gap between completion of DNA replication and the onset of mitosis. From G₁-phase a cell can leave the cell cycle and enter G₀, a quiescent phase. Regulation of the cell cycle predominantly occurs at three major control points, which govern the transition from G₀ to G₁, from G₁ to S and from G₂ to M-phase.

REFERENCES

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SOURCE

Mitotic Cells (8B3G) is a mouse monoclonal antibody raised against total lysate of the human bladder carcinoma cell line T24.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Mitotic Cells (8B3G) is recommended for detection of mitotic cells of human and zebrafish origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

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.