

## Product datasheet

# Anti-Mitotic Cells antibody [8B3G] ab8956

★ ★ ★ ★ ★ 2 Abreviews 2 References 3 Images

### Overview

---

<b>Product name</b>	Anti-Mitotic Cells antibody [8B3G]
<b>Description</b>	Mouse monoclonal [8B3G] to Mitotic Cells
<b>Host species</b>	Mouse
<b>Specificity</b>	Strongly stains mitotic cells and can therefore be used in flow cytometric analyses of cell suspensions to detect the mitotic index. Together with a quantitative DNA staining procedure (e.g. propidium iodide) this antibody clearly distinguishes these M-phase cells from cell at other stages of the cell cycle. Dynamic information can be obtained by combining BrdU incorporation with antibody staining, which can distinguish and quantitate the four major fractions of the cell cycle. This antibody can be used for flow cytometric analyses and immunocytochemistry, it is not suitable for immunoblotting.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, ICC, IHC-Fr <b>Unsuitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Human, Zebrafish
<b>Immunogen</b>	Total cell lysate of the human bladder carcinoma cell line T24.

### Properties

---

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.09% Sodium azide Constituent: PBS
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	8B3G
<b>Myeloma</b>	Sp2/0-Ag14
<b>Isotype</b>	IgM

### Applications

---

Our [Abpromise guarantee](#) covers the use of **ab8956** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
-------------	-----------	-------

Flow Cyt

ICC

IHC-Fr

**Application notes**

Flow Cyt: 1/50 - 1/100.

ICC: Use at an assay dependent concentration.

IHC-Fr: Use at an assay dependent concentration. Recommended range is 1:50 - 1:100 for immunocytochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent.

Is unsuitable for WB.

This antibody can be used in flow cytometric analyses of cell suspensions to detect the mitotic index.

Using immunocytochemistry, a combination of this antibody and BrdU ([ab8955](#)) can distinguish and quantitate the four major fractions of the cell cycle.

Not yet tested in other applications.

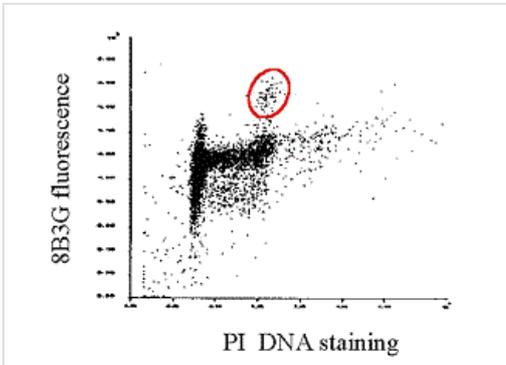
Optimal dilutions/concentrations should be determined by the end user.

**Target**

**Relevance**

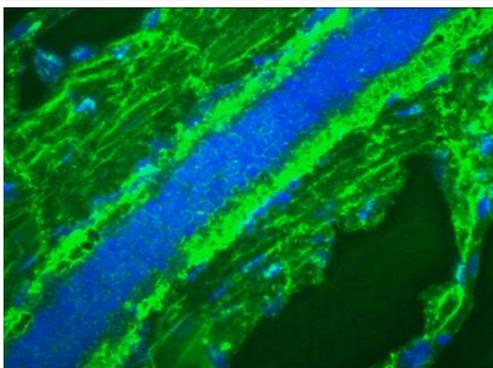
The life cycle of a eukaryotic cell consists of various phases, two of which can easily be identified. Firstly, during mitosis (M-phase), in which the cell divides into two identical daughter cells, chromosome condensation and spindle formation are microscopically visible. Secondly, in S-phase the DNA of a cell is replicated, a process that 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.

**Images**



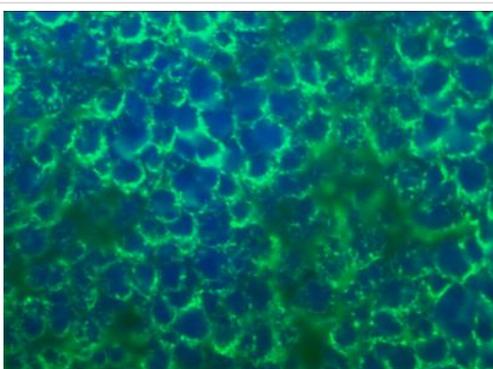
Flow Cytometry - Anti-Mitotic Cells antibody [8B3G] (ab8956)

Dual parameter flow cytometric analysis of human colon cancer HT29 cells stained with monoclonal antibody 8B3G and propidium iodide (PI). The mitotic cell fraction is encircled.



Immunohistochemistry (Frozen sections) - Anti-Mitotic Cells antibody [8B3G] (ab8956)

ab8956 staining a membrane-associated compound in proliferating (all) cells in tissue sections of 9 day old Zebrafish embryos by Immunohistochemistry (Frozen sections). Samples were frozen sections fixed in Acetone:Methanol 1:1. ab8956 used at 1:50 dilution and incubated for 45 minutes at room temperature.



Immunohistochemistry (Frozen sections) - Anti-Mitotic Cells antibody [8B3G] (ab8956)

ab8956 staining a membrane-associated compound in proliferating (all) cells in tissue sections of 9 day old Zebrafish embryos by Immunohistochemistry (Frozen sections). Samples were frozen sections fixed in Acetone:Methanol 1:1. ab8956 used at 1:50 dilution and incubated for 45 minutes at room temperature.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors