

## 5'-Bromo-2'-deoxy-uridine Labeling and Detection Kit I

Cat. No. 11 296 736 001 100 tests

## 5'-Bromo-2'-deoxy-uridine Labeling and Detection Kit II

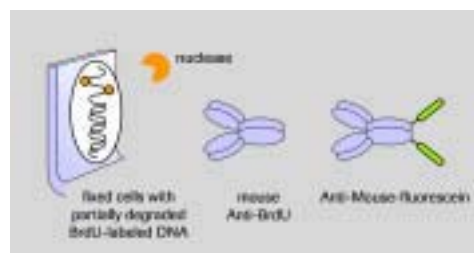
Cat. No. 11 299 964 001 100 tests

<b>Type</b>	1st generation immunostaining assays for fluorescence (Kit I) or light (Kit II) microscopy
<b>Useful for</b>	Detection of BrdU-labeled DNA in proliferating individual cells
<b>Samples</b>	Cultured or freshly isolated cells, tissue explants or sections
<b>Method</b>	Incubation of cells with BrdU, or injection into an animal, followed by nuclease digestion of DNA of cells or tissue sections and indirect immunodetection (with anti-BrdU and a secondary antibody) of incorporated BrdU label
<b>Time</b>	approx. 2–3 h (+ BrdU labeling)

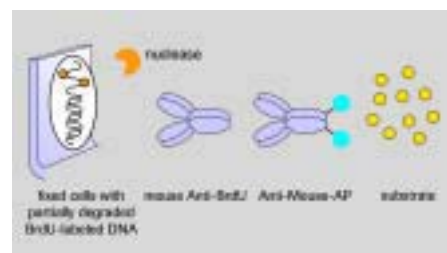
**Significance of kits:** The BrdU Labeling and Detection Kits I and II offer an indirect immunostaining method for visualizing proliferating cells under a fluorescence microscope (Kit I) or under a light microscope (Kit II). The kits detect BrdU-labeled DNA with an anti-BrdU antibody, then make the antibody-labeled DNA visible with either a fluorescein-labeled (Kit I) (Figure 72) or an alkaline phosphatase-labeled anti-mouse secondary antibody (Kit II) (Figure 73).

**Note:** These kits belong to the first generation of kits used to measure DNA synthesis. The same assay procedure has been optimized and improved in the second generation of kits, namely the *In Situ Cell Proliferation Kit, FLUOS* (for flow cytometry and fluorescence microscopy) and the *In Situ Cell Proliferation Kit, AP* (for light microscopy). For a detailed description of these second generation kits, see the following pages.

**Other applications:** For examples of how the BrdU Labeling and Detection Kits I and II can be used in the laboratory, see Appendix, pages 147–149.



▲ Figure 72: Principle of the BrdU Labeling and Detection Kit I (Fluorescein).



▲ Figure 73: Principle of the BrdU Labeling and Detection Kit II (AP).