BrdUTP [5-Bromo-2’-deoxyuridine 5’-triphosphate] *10 mM in TE Buffer*

**Ordering Information**

| Product Numbers: 17031 (100 μL) | Storage Conditions | Keep at -20 °C |

**Chemical and Physical Properties**

Molecular Weight: 612.98
Concentration: 10 mM in TE buffer

**Biological Applications**

BrdUTP can be incorporated into DNA for the subsequent detection with anti-BrdU antibodies. BrdUTP incorporation into DNA is also a tool for random-mutation introduction.

**Sample Protocol for DNA Strand Break Labeling with BrdUTP**

The following procedure can be adapted for most cell types. Growth medium, cell density, the presence of other cell types and other factors may influence the experiment results.

1. Prepare cells as desired, and fix cells with 4% formaldehyde.
2. Resuspend the cell pellet (0.5–1 × 10⁶ cells) in 50 μL of a solution containing:
   - 10 μL of 1 M potassium (or sodium cacodylate), 125 mM HCl, pH 6.6, and 1.25 mg/mL BSA.
   - 0.5 μL of 10 mM BrdUTP.
   - 0.5 μL (12.5 units) TdT.
   - 5 μL of 10 mM CoCl₂ solution.
   - 35 μL distilled H₂O.
3. Incubate the cells for 40 min to 1 hour at 37 °C.
4. Rinse the cells with PBS.
5. Resuspend the cells in 100 μL of fluorescent anti-BrdU Antibody solution (e.g., iFluor™ 647-conjugated)
6. Incubate at room temperature for 1 h.
7. Optional: Add Propidium Iodide (or DAPI) to stain cell nuclei if desired.
8. Analyze the cells by flow cytometry.

**References**


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