

## Product Information

### EdU (5-ethynyl-2'-deoxyuridine)

Catalog No.	Unit Size
A012	50 mg

**Storage upon receipt:**

- -20°C
- Protect from light

### Product Description

EdU (5-ethynyl-2'-deoxyuridine) can be used as a replacement for BrdU (5-bromo-2'-deoxyuridine) and directly measures de novo DNA synthesis or S-phase synthesis of the cell cycle using click chemistry. Click chemistry is a method of covalently coupling an azide with an alkyne. Detection of EdU employs the copper(I) catalyzed click reaction with an azide modified fluorescent dye to form a stable triazole ring. Because of the small size of the click detection reagent, no harsh denaturation steps are needed to gain access to the DNA. Eliminating this step allows for more reproducible results, a simpler and quicker protocol and measurements which can easily be multiplexed with relevant antibody based targets including phospho-histone H3, Ki-67, and cyclin B1 as well as dual-pulse experiments with BrdU by flow cytometry, fluorescence microscopy, microplate (HTS) or high-throughput imaging (HCS).

### Chemical structures

**EdU**

Molecular formula:  $C_{11}H_{12}N_2O_5$

Molecular weight: 252.23

CAS name/number: 61135-33-9

