

iClick™ EdU Cell Proliferation Assays

A simple and convenient way to track new DNA synthesis

Measuring the synthesis of new DNA is a precise way to assay cell proliferation in individual cells or in cell populations.

ABP Biosciences has developed iClick™ EdU assays designed to analyze the DNA replication in proliferating cells based on incorporation of the nucleoside analog EdU into DNA. Detection is achieved through a copper-catalyzed “click” reaction that is complete typically within 30 minutes.

The iClick™ EdU assays have great advantage compared to the traditional BrdU assay (Figure 1), providing a simple and fast detection of cell proliferation in vitro and in vivo without DNA denature step and the use of antibody, and offering multicolor choice for multiplexing.



- **Simplicity:** Labeling is complete in two steps.
- **Convenience:** No DNA denature step or harsh treatment required.
- **Consistency:** Not dependent on variable antibody lots for detection.
- **Multiplexity:** Compatible with cell cycle dyes and antibody-based stains.

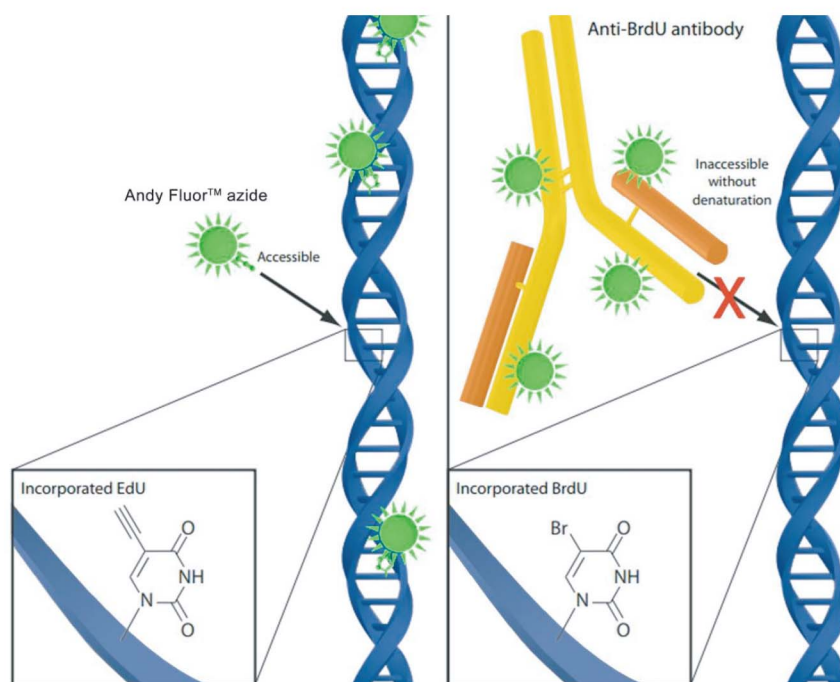


Figure 1. Detection of new DNA synthesis with EdU or BrdU. The small size of Andy Fluor™ azide can easily access to incorporated EdU for 'click' reaction without the need to denature the DNA. Without DNA denaturation, incorporated BrdU is inaccessible to antibodies used for detection.

iClick™ EdU Assay Workflow

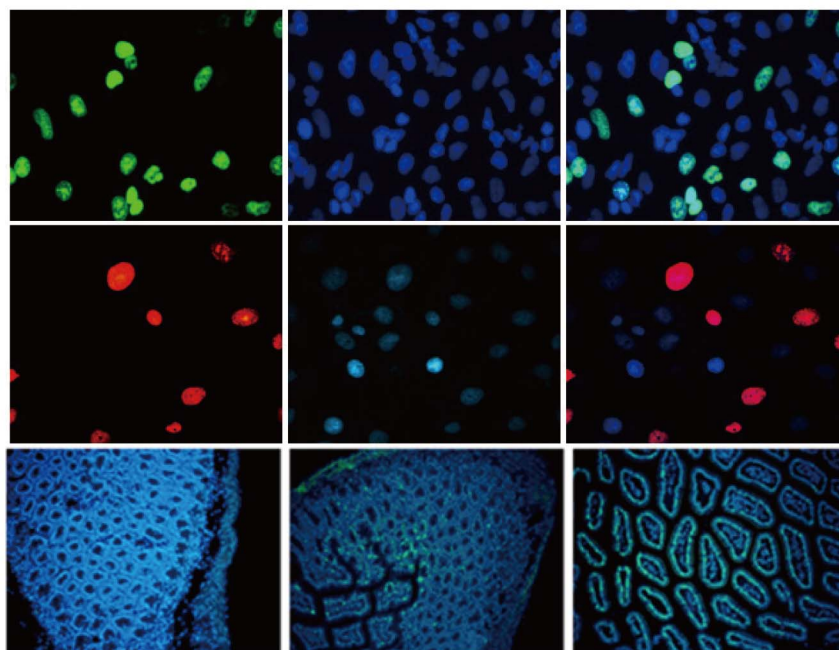


Figure 2. Detection of cell proliferation in cell and mouse tissue. A549 cells were treated with 10 μ M EdU for 2 hr, then detected with Andy Fluor™ 488 azide (green, top), and Andy Fluor™ 594 azide (red, middle), cells were counterstained with DAPI (blue). A mouse was injected intra-peritoneally with 5 mg EdU per kilogram body weight, then sacrificed at 0, 12, and 24 hr. The mouse intestine tissue was detected with Andy Fluor™ 488 azide (green, bottom), and counter-stained with DAPI (blue).

Cat. No.	Product Name	Application	Ex/Em (nm)	Unit Size
A003	iClick™ EdU Andy Fluor™ 488 Imaging Kit	Imaging	495/520	50 assays
A004	iClick™ EdU Andy Fluor™ 555 Imaging Kit	Imaging	555/565	50 assays
A005	iClick™ EdU Andy Fluor™ 594 Imaging Kit	Imaging	590/615	50 assays
A006	iClick™ EdU Andy Fluor™ 647 Imaging Kit	Imaging	650/665	50 assays
A007	iClick™ EdU Andy Fluor™ 488 Flow Cytometry Assay Kit	Flow Cytometry	495/520	50 assays
A008	iClick™ EdU Andy Fluor™ 647 Flow Cytometry Assay Kit	Flow Cytometry	650/665	50 assays
A009	iClick™ EU Andy Fluor™ 488 Imaging Kit	Imaging	495/520	50 assays
A010	iClick™ EU Andy Fluor™ 594 Imaging Kit	Imaging	590/615	50 assays