

## Assay Name: Cell cycle analysis using EdU and DAPI

**Assay ID:** Celigo\_02\_0004

**Description:** Measure cell cycle in drug treated and control samples by staining with EdU and DAPI

**Stains:** EdU (green, detects cells in the S-phase), DAPI (blue, detects cells in G<sub>0</sub>/G<sub>1</sub> and G<sub>2</sub>/M phases)

**Imaging channels:** Bright field, Green, Blue

**Image analysis algorithm:** Celigo software Target 1 + 2 + 3

### Methods:

1. Seed A549 cells in a 96-well plate
2. Treat with selected drugs or vehicle control
3. Add media with EdU per well
4. Fix the cells in ice cold, 100% Methanol for 15 minutes
5. Stain with DAPI (Nexcelom, Cat# CS1-0127)
6. Image entire 96-well plate (whole well imaging) in ~15 minutes
7. Analyze cell cycle data using Celigo gating interface ~ 20 minutes

### Results:

Cell cycle assay using A375 cells with Staurosporine-treated positive control

