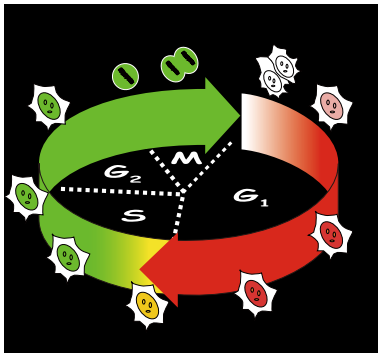
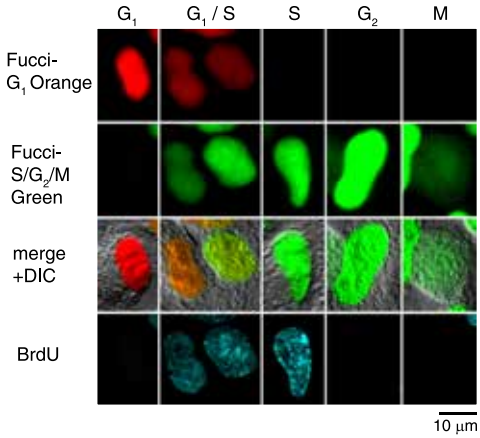
Fucci (Fluorescent Ubiquitination-based Cell Cycle Indicator)

- **Real-time visualization of cell-cycle progression**
- **Spatio-temporal imaging of cell cycle dynamics**



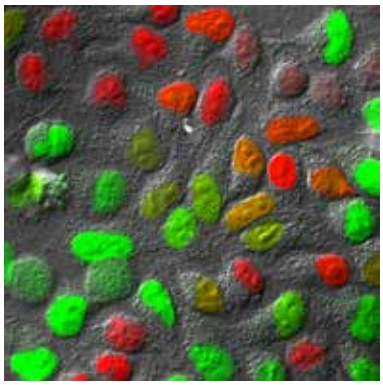
Fluorescent ubiquitination-based cell cycle indicator (Fucci) is a sophisticated technology which can visualize G_1 and/or S/G_2/ M phases of cell cycle in living cell. The mechanism of action of Fucci is based on ubiqitin-proteasome protein degradation system.
Fucci is a set of fluorescent probes: Fucci-G_1 Orange and Fucci-S/G_2/M Green. Fucci-G_1 Orange is a fusion protein of a fragment of human Cdt1 (amino acids 30-120) with the orange fluorescent mKO2 (monomeric Kusabira-Orange 2) that indicates the G_1 phase. Fucci-S/G_2/M Green is a fusion protein of a fragment of human Geminin (amino acids 1-110) with the green fluorescent protein mAG1 (monomeric Azami-Green 1) that visualizes S, G_2 and M phases.

Fluorescent images of Fucci cells



Each cell cycle of the G_1, G_1/S , S, G_2, and M phases can be determined by the combination of Fucci-G_1 Orange, Fucci-S/G_2/M Green, and an antibody against PCNA. G_1 phase is indecated by orange. Both orange and green were observed in the G_1/S phase. Additional immunostaining color by PCNA was observed at the initiation of the S phase. Cells with pure green fluorescence were either in the S or G_2 phase and were distinguished by immunostaining of the S phase. The rest of the cells were classified into the M phase.

Fucci stable transfectant (HeLa cells)



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Volume: 20 μg (In cese of Vector set, each 20 μg)

Code No.	Products
AM-V9001M	pFucci-G_1 Orange (Cloning vector)
AM-V9003M	pFucci-G_1 Orange (Expression vector)
AM-V9010M	pFucci-S/G_2/M Green-Hyg (Expression vector)
AM-V9014M	pFucci-S/G_2/M Green (Cloning vector)
AM-V9016M	pFucci-S/G_2/M Green (Expression vector)
AM-V9030M	pFucci-S/G_2/M Green(N+C)-Hyg (Expression vector)
AM-V9034M	pFucci-S/G_2/M Green(N+C) (Cloning vector)
AM-VS0601M	Fucci Cloning vector Set (Orange+Green)
AM-VS0605M	Fucci Cloning vector Set (Orange+Green (N+C)
AM-VS0607M	Fucci Expression vector Set (Orange+Green-Hyg)
AM-VS0608M	Fucci Expression vector Set (Orange+Green (N+C)-Hyg)

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