

Live/Dead assay by FACS Analysis

Contact information:

Human Vaccine Institute Flow Cytometry Facility

Patti McDermott, 232 CARL building, Tel: 684-4130, E-mail:

pmederm@acpub.duke.edu

John F. Whitesides, (Section Head) 237 CARL Building, Tel: 684-4895, E-mail:

jwhtsds@duke.edu

Make an appointment online:

<http://Hviflow.duhs.duke.edu/calender>

Username: CARL232; Password: hviflow

Minimum sign up time is 30 min, 24 hour notice by phone for cancellation

(Rates: \$57.86/h for phenotype; \$80.32/h for sorting; \$28.93/h for consulting)

Procedures:

1. Seed cells in 6-well plates (1×10^5 cells/well) one day before transfection.
2. Transfection with 0.25 μg of the gene of interest in expression vector (i.e. pCI-neo or Igf1r-Myc), 0.25 μg reference maker gene (i.e. pGFP-N2) and 2 μl of lipofectamine 2000/well. Change medium to 10% FBS/DMEM 6 hours later.
3. Check the transfection efficiency under microscope by observing GFP+ cells at about 24 hrs after transfection. Change medium with or without freshly prepared 100 μM H_2O_2 and incubate for another 24 hours
4. Harvest the medium including the floating cells into conical tubes on ice. Trypsinize the remaining adherent ($\sim 100 \mu\text{l}$ 0.25% Trypsin-EDTA solution) cells and wash with 1 ml 10% FBS/DMEM twice. Pool the cells and spin at 2000 rpm (The Beckman centrifuge in the culture room) at 4°C for 10 min.
5. Wash cells with 1 ml ice-cold PBS followed by 1000 x g spin (The desktop endorff centrifuge) for 10 min at 4°C.
6. Suspend the cells in 500 μl PBS, put them on ice and bring to FACS facility on campus.
7. Add PI (1 $\mu\text{g}/\text{ml}$) and incubate at room temperature for 10 min. Load the cells for FACS

Note: