Exp5: Cell Transfection

Transfer DsRed and EGFP to CHO-K1 cell

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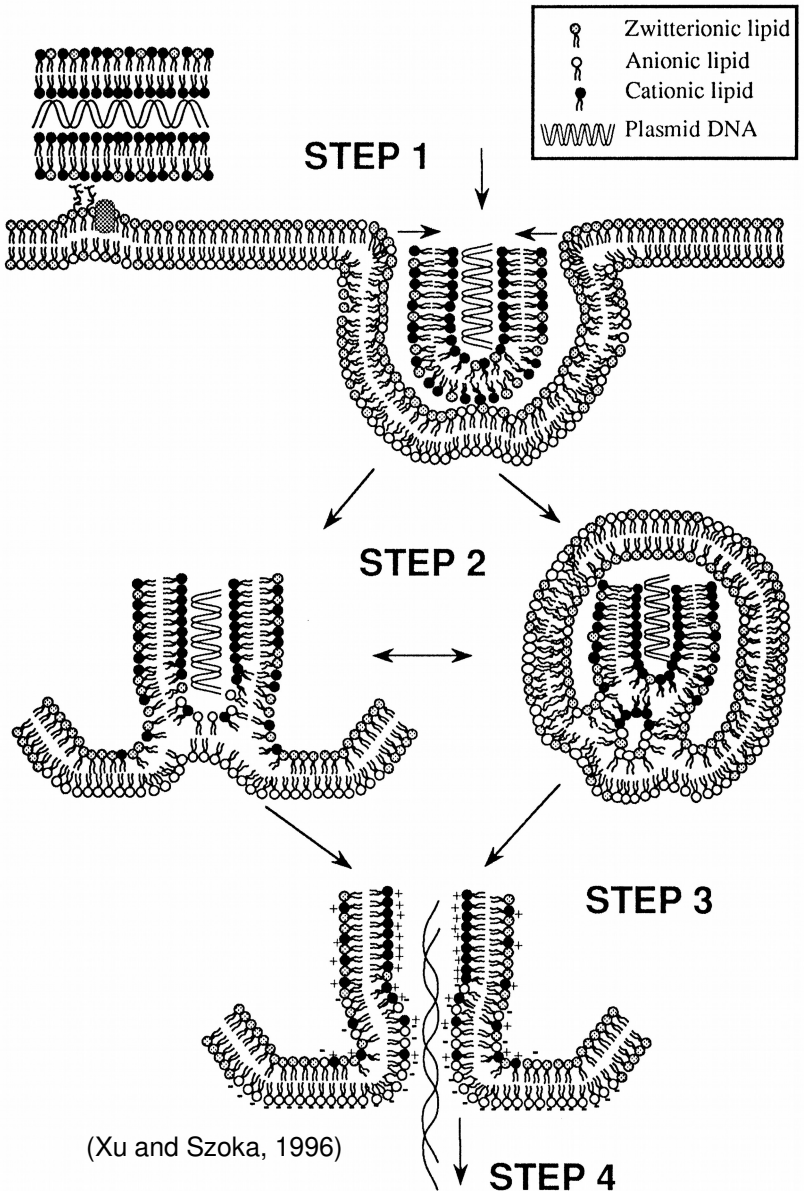
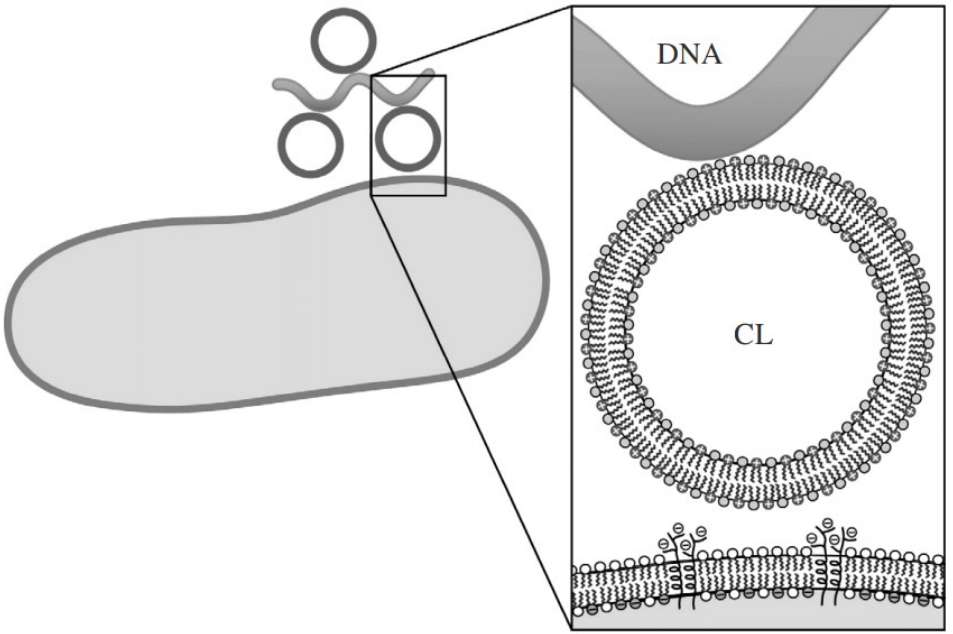


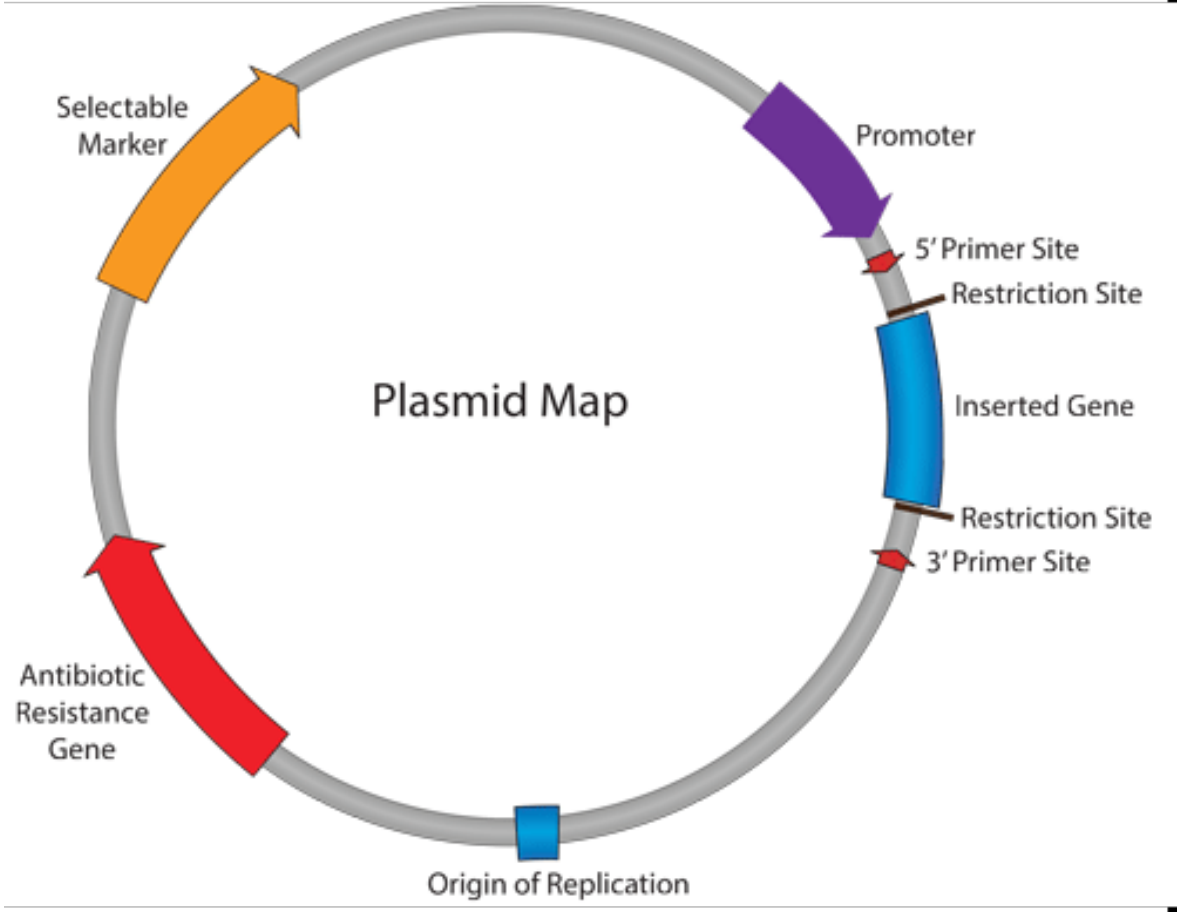
(Xu and Szoka, 1996)

Principle: Cationic Liposome



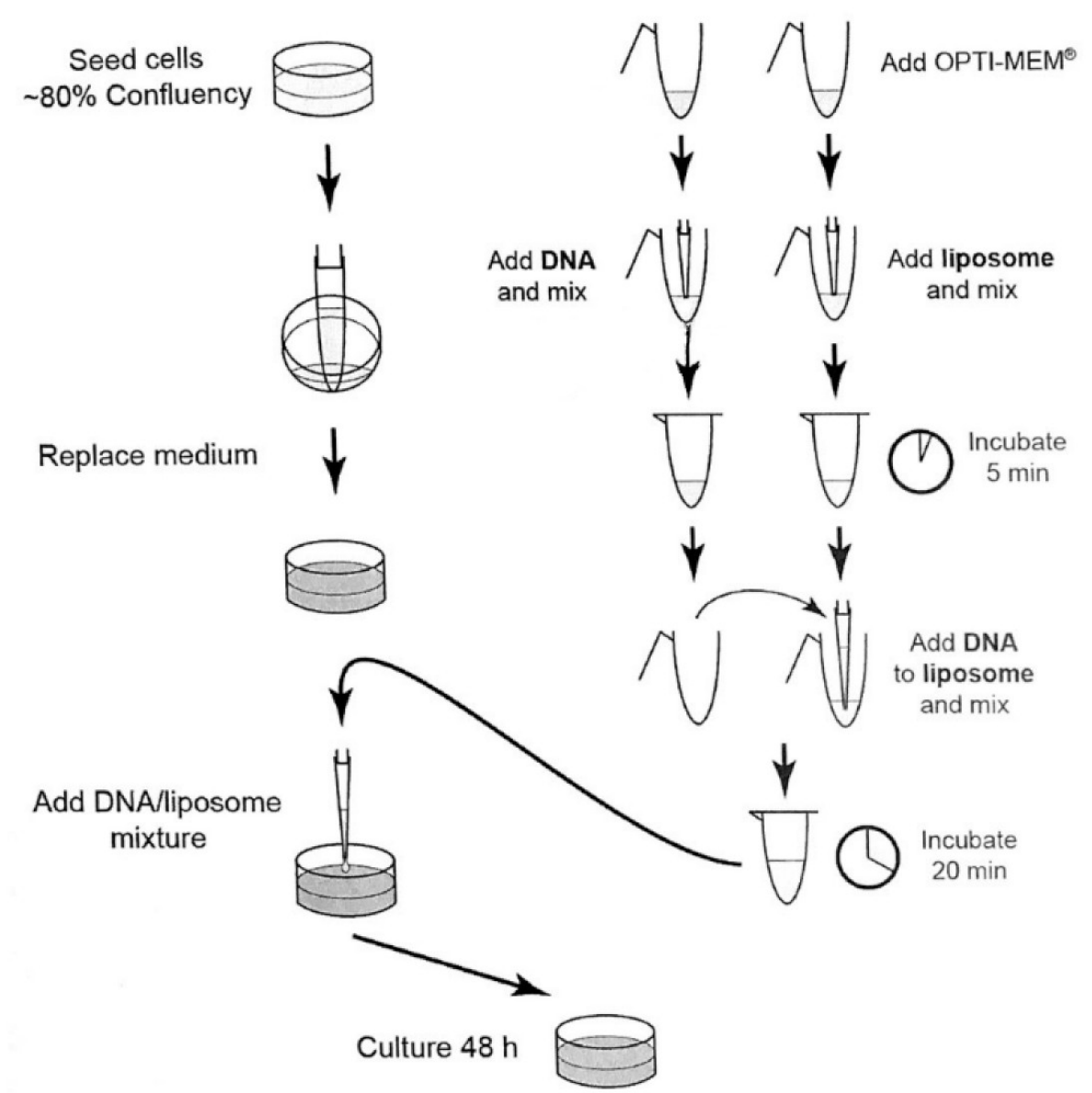
(Safinya et al., 2006)

Principle: Vector Design



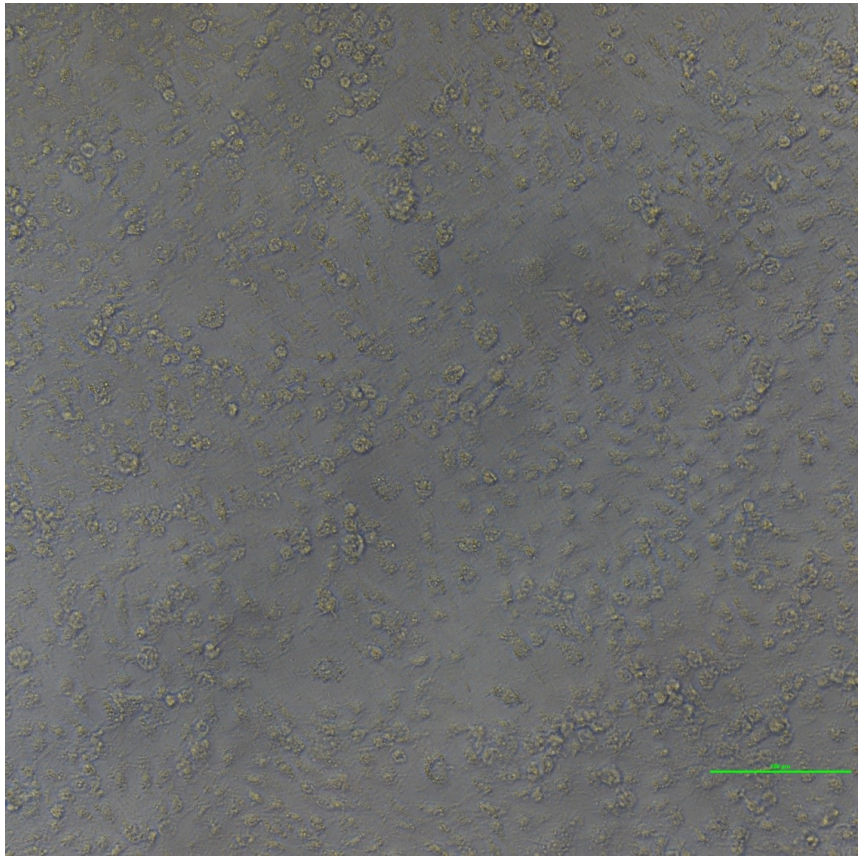
- Reporter Gene vs Marker
- Fluorescence Protein
- Nuclear Localization Signal or Sequence (NLS)

Procedures

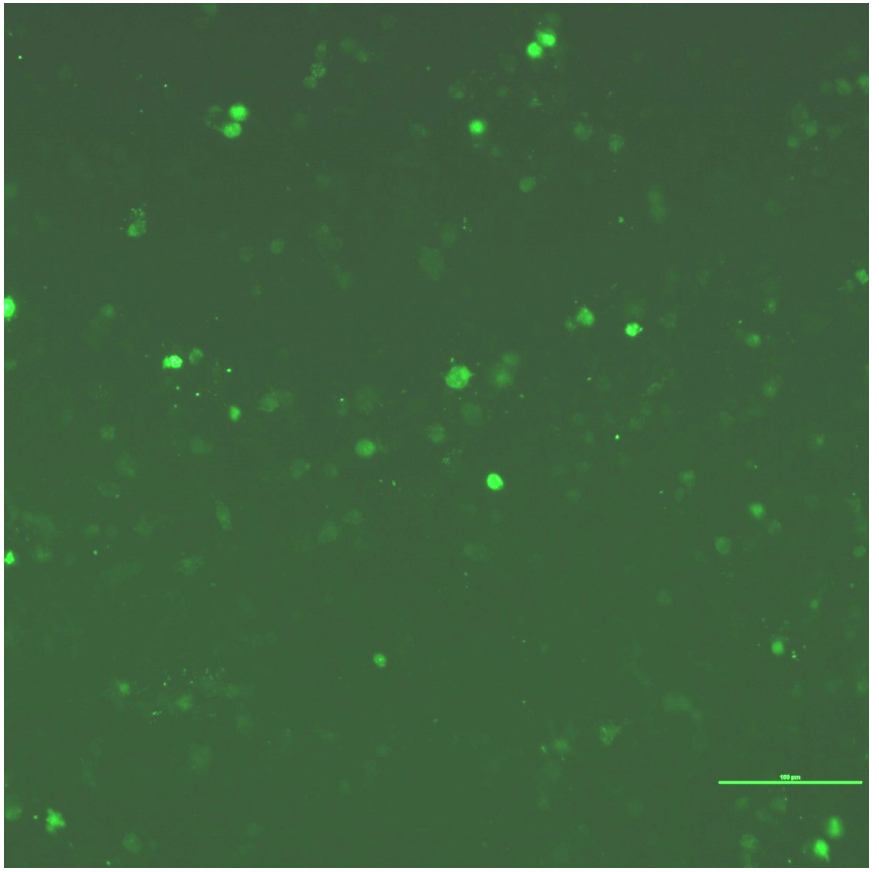


pDsRed 2-Nuc	pEGFP-Actin	Double Transfection
0.25µl	0.25µl	0.125µl+0.125µl
0.5µl	0.5µl	0.25µl + 0.25µl

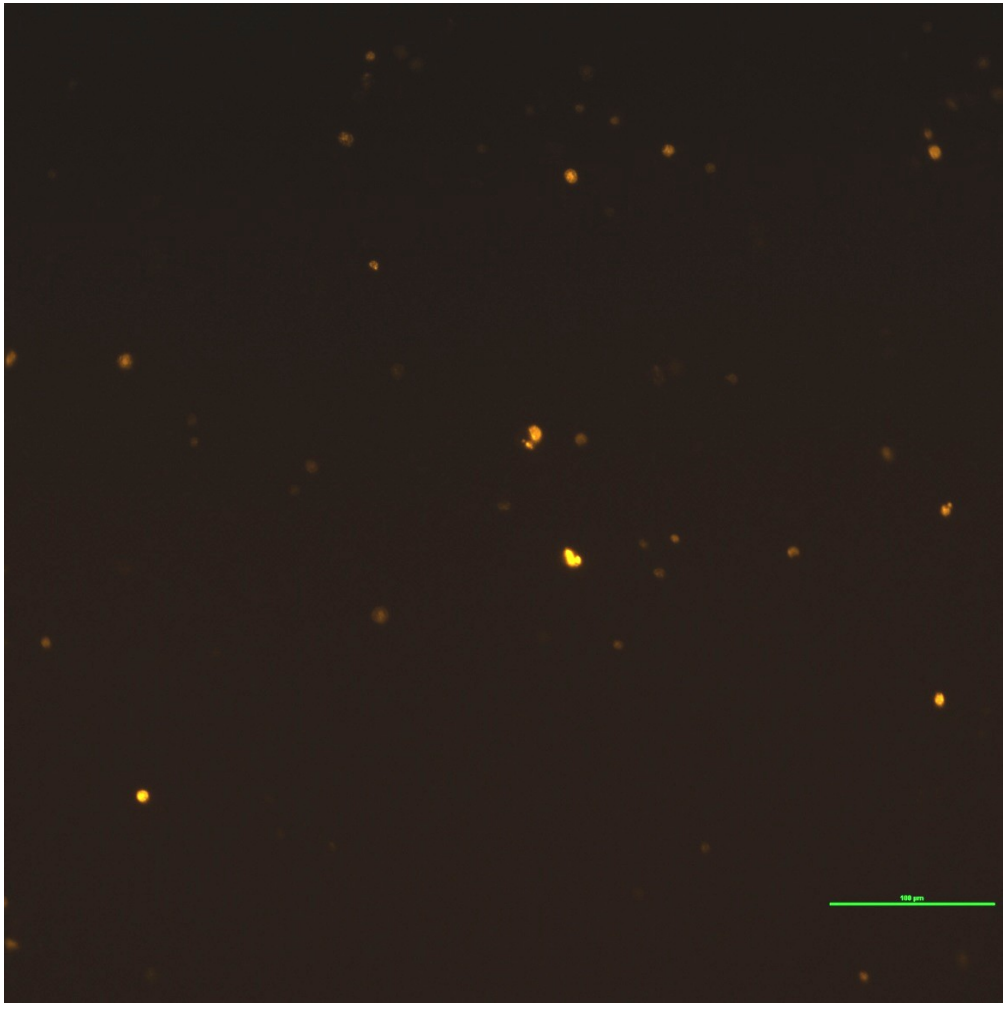
Result: Cotransfection CHOK1



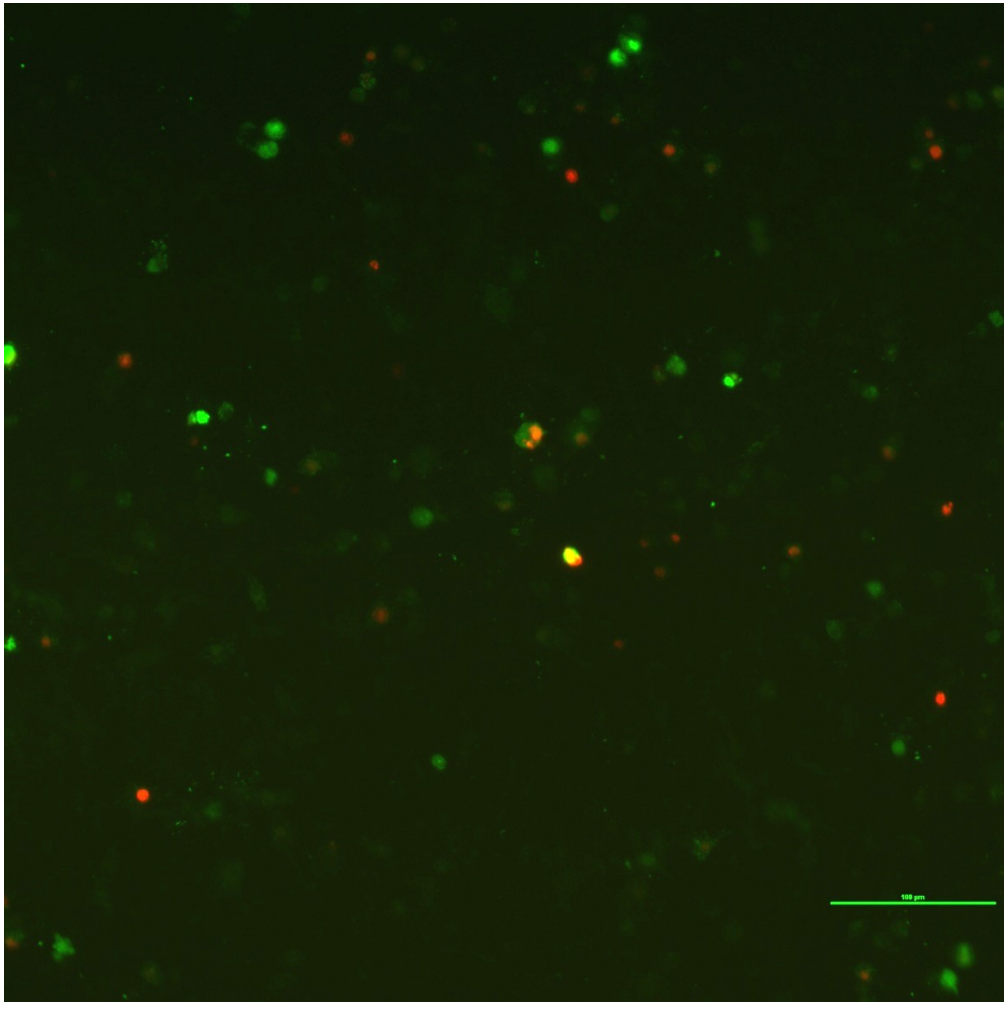
BF(Scale Bar 100micron)



Green Fluorescence



Red Fluorescence



Merged Green and Red Fluorescence

Notice

- Incubate mixture for 20 min
- Add mixture drop by drop
- Mix well

Efficiency factors

- Cell condition
- DNA quality
- Avoid serum and antibiotics
- Time exposed to transfection reagent

Other methods

- Stable transfection
- Viral transduction