



Transfected Live Cells

Catalog Number CS-0001

(For Research Use Only)

Introduction

In order to expedite your research, Signosis has developed the wide range of reliable transient transfected cells. The cells can be re-cultured and used for varieties of studies such as the projects on signal transduction pathways and protein-protein interaction of transfected and control cells under different treatments.

We offer transfected live cells in a number of popular cell lines and categorize them to different functional groups of genes, including TF reporter, miRNA reporter, TF, kinase and cytokine overexpression. The cell lines include HEK293, Cos-7, HeLa, NIH3T3, HeGP2. We have hundreds of transfected cells available for selection.

Principle

The Transfected Live Cells are overexpressed with a specific gene or a reporter via transfection, and then the cells are frozen down with the most optimal method to ensure the 85-90% survival rate when you follow the thawing procedure on the manual. The cells can be re-cultured, and respond to the corresponding stimuli for monitoring the functions and activation of a gene. The cells can be used for different types of assays, such as reporter luciferase assay, ELISA (supernatant and cell pellets), PCR, RT-PCR, Western-blotting and Co-IP.

Materials provided

- One vial of 5×10^6 cells, in Freezing Media (store the vial in liquid nitrogen until it is ready to be thawed).

Material required but not provided

- Dulbecco's Modified Eagle's Medium (DMEM)
- Fetal Bovine Serum (FBS)
- Penicillin (100 units/ml) Streptomycin (100ug/ml)

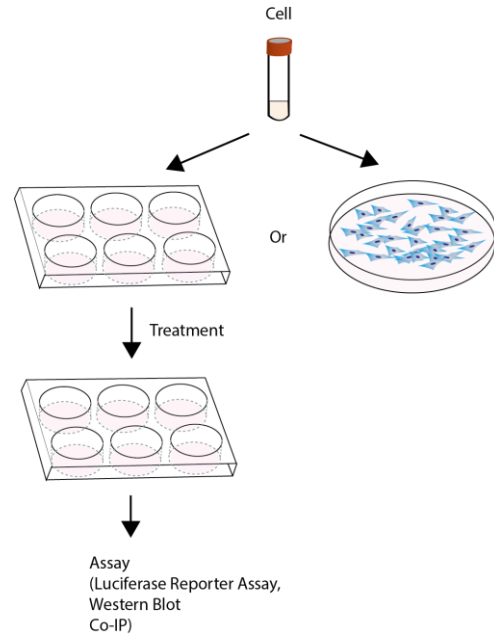


Diagram of transfected live cells

Handling cells upon arrival

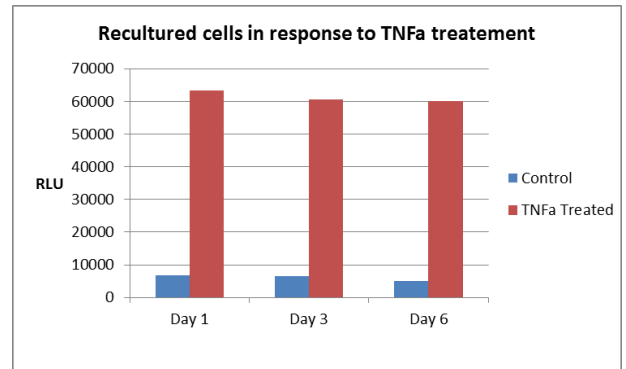
- It is strongly recommended that you follow instructions as soon as possible upon arrival of cells.
- Prepare **Complete Growth Media**: DMEM (in high glucose + sodium pyruvate + L-glutamine + Phenol Red) + Penicillin (100 units/mL) Streptomycin (100ug/ml) + 10% FBS

Initial Culture Procedure

Important: The first propagation of cells should be for generating stocks for future use. Cells undergo genotypic changes resulting in reduced responsiveness over time in normal cell culture conditions. Therefore, it is critical to prepare an adequate number of frozen stocks at early passages.

1. Prepare culture dish by adding 15ml of pre-warmed **Complete Growth Media** to a 100-mm culture dish.
2. Quickly thaw cells in a 37 °C water bath with constant agitation.
3. Immediately transfer entire contents of the vial to the prepared culture dish. **DO NOT** pipette cells up and down as this may damage the cells.
4. Rock the culture dish to equally distribute the cells.
5. Place the culture dish with cells in a humidified incubator at 37°C or 5% CO₂.
6. After 24 hours, change media.
7. Change media every 2-3 days using Complete Growth Media.
8. When cells reach 90% confluency (usually within a few days), cells are ready for treatment.

Data Example



Cells pre-transfected with NFkB reporter vector for 1, 3, and 6 days.

Cells from frozen stock treated with TNFa for 8 hours respectively.