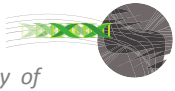
BCC BioCellChallenge From Delivery to Discovery

GeneCellin Quick Guide

DNA Transfection

GeneCellin
DNA Transfection Reagent



GeneCellin is a powerful polymer-based in vitro transfection reagent which enables the achievement of higher efficiencies in the delivery of plasmid DNA into cell lines and primary cells compared to other reagents. GeneCellin is particularly adapted to sensitive cells like **HEK, HeLa, HUVEC, BEAS-2B, Neuroblastoma, stem cells** *on which your standard lipid is often toxic.*

Applications

For stable and transient transfections of plasmid DNA

Advantages

- Very simple to use
- Very low toxicity
- Low amounts of DNA required

Tips for DNA transfection

To increase transfection efficiency:

- You can try to transfect your cells in serum-free cell culture medium. After 4 hours incubation-time, replace the transfection medium by a culture medium containing serum.
- You can try to decrease the volume of cell culture medium just before adding the complexes onto the cells.

To decrease toxicity:

- You can try to increase the number of cells or decrease the amount of DNA. Do not change the volume of reagent.
- Use high quality DNA. Toxic effects can come from a DNA prep that is not well purified.

Optimum results are obtained 24 hours after transfection but sometimes, you may need to wait up to 48h for best results.

GeneCellin
DNA Transfection Reagent

SHORT PROTOCOL

Transfection protocol is provided for a 24 well-plate culture vessel.

1. Seed 50,000 adherent cells the day before transfection in 0.5 mL of serum containing culture medium.
2. Dilute 0.5 µg of DNA in 100 µL of serum free medium (DMEM, RPMI or other growth medium).
3. Add 2 µL of GeneCellin to the diluted DNA solution and mix the solution by vortexing for 2-3 seconds.
4. Incubate 15 minutes at room temperature.
5. Add the 100 µL of GeneCellin / DNA mixture dropwise onto the cells plated in 500 µL of serum containing culture medium and gently rock the plate to ensure an even distribution of the complexes (do not swirl the plate or the dish).
6. Incubate at 37°C in a CO_2 incubator.
7. Analyse transgene expression 24-48 hours later.

Full Protocol available on
http://www.biocellchallenge.com/documents/protocol_GeneCellin.pdf