DNA-transfection of 293FT cells using "Biontex K2® Transfection System".

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Materials and Methods

Cell culture

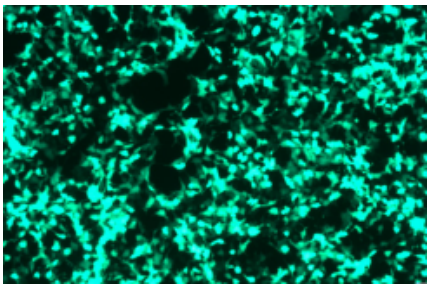
293 FT cells were cultured in 48 well plate (Corning), in high glucose Dulbecco's modified eagle medium (Sigma-Aldrich) supplemented with 10% fetal calf serum, and 1% Penicillin/Streptomycin. The amount of medium was 500 µl. Transfection was performed when cells had reached a confluency of 60%.

Cell transfection

Cells were treated with K2® Multiplier, 2 hours before DNA transfection. For this K2® Multiplier was dripped slowly into the medium and mixed by gently pipetting the mixture up and down. K2® Transfection Reagent was mixed with high glucose Dulbecco's modified eagle serum-free medium (DMEM) and left in room temperature during preparation of the DNA. Plasmid-DNA encoding GFP was mixed with DMEM. DNA solution was added to the solution containing the K2® Transfection reagent and mixed by pipetting, followed by 20 minutes incubation at room temperature. Transfection solution was applied to cells followed by gently swaying the plate to achieve mixing. Transfections were incubated at 37C and 5% CO2 for 24 hours. Transfection efficiency was estimated by fluorescence microscopy.

Number of seeded cells	K2® Multiplier	K2® Transfection reagent	pWOX-CMV-GFP
$5x10^4$	2.5 µl	0.8 ul	0.4 ug

Results:



Transfection of pWOX-CMV-GFP into 293 FT cells.

Conclusions

Fluorescence microscopy shows successful transfection of the DNA with high and moderate transfection. The cells show normal morphology. My data show high transfection rates (85-90%) without any cytotoxic effects of the transfection system.