

Transfection SK-MEL-28, C2C12, MCF-7 and 293T cell lines with Metafectene

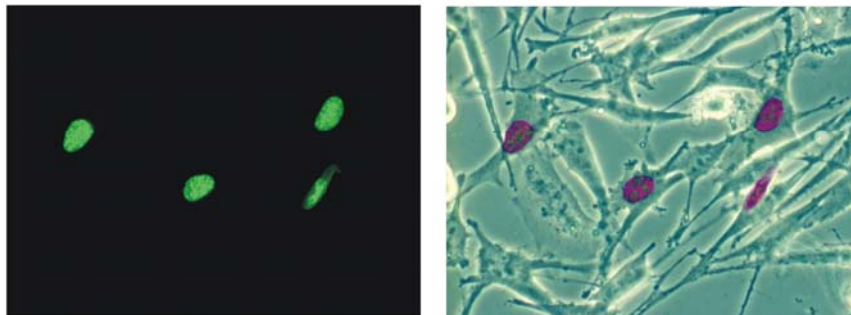
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The SK-MEL-28 cells were plated in equal amounts in six 35 mm dishes and transfected with METAFECTENE after an overnight incubation at 37°C, 5% CO₂. The confluency was about 50% at the day of transfection. The transfection was carried out like described in the manual. The Incubation time of the DNA-lipid complex formation was 15 minutes at RT. After addition of the complex to the cells, they were incubated at 37°C, 5% CO₂ overnight. As DNA for transfection the plasmid vector pHMGA1a-GFP was used.

Amount of DNA [μg] pHMGA1a-GFP	Amount of METAFECTENE [μl]
1 μg	10 μl
3 μg	10 μl
2 μg	5 μl
2 μg	20 μl
2 μg	30 μl

SK-MEL-28 cell line transfected with Metafectene : 2 μg DNA + 5 μl METAFECTENE overnight



Conclusion:

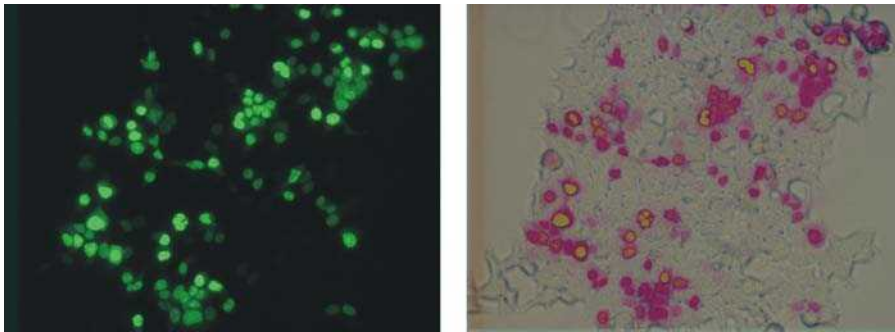
SK-MEL-28 cells:

The transfection rate showed a slight increase when using 3 μg instead of 1 μg DNA. But there was not much difference between the approaches using 5 μl , 20 μl or 30 μl METAFECTENE. All in all we got a transfection rate of about 15 %.

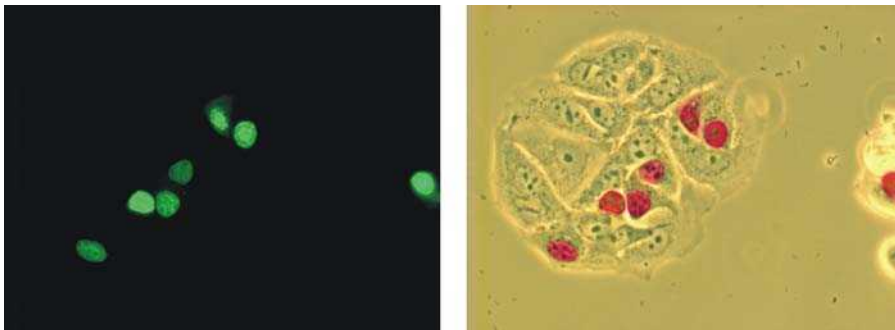
Three different cell lines were tested additionally without optimization:

In this approach the incubation time of the DNA-Lipid complex with the cells was 4 h in medium that contains serum and antibiotics. Transfection was carried out in 35 mm dishes with 2 μg DNA (pHMGA1a-GFP) and 10 μl METAFECTENE.

293T kidney cells: Transfection rate about **30 %**



MCF-7 human breast cancer cells: Transfection rate about **30 %**



C2C12 mouse myoblast cells; Transfection rate about **<5 %**

