

Transfection of 293 T cells with Metafectene

Dr. Ulf Dittmer

University of Würzburg, Dep. of Virology, Germany

Protocol and Results:

Protocol: Optimisation protocol given in the manual of Metafectene

(12-well plate format; number of cells seeded the day before transfection 1 x 10⁵; 10 % FCS)

Plasmid construct: pCG-vector coding an envelope protein of Friend Murine Leukemia Virus; cells were treated with suitable antibody and positive cells were detected with FACS

	Amount [µl]	DNA [mg]	Result [% transfected cells]
METAFACTENE	1	0,5	76
	2	0,5	80
	4	0,5	82
	6	0,5	69
METAFACTENE	2	1,0	62
	4	1,0	82
	8	1,0	88
	12	1,0	84
METAFACTENE	4	1,5	76
	8	1,5	89
	12	1,5	90
	16	1,5	85

Standard method with Ca-chloride works best (70% positive cells) with 15 µg DNA and 2 x10⁶ cells. Reducing the cell number or DNA amount resulted in worse transfection rates.