Quantification of Plasmid DNA

- start the Cary WinUV program "RNA-DNA" and let the UV-lamp warm up
- dilute plasmid DNA from miniprep (1µL DNA + 99µL ddH_2O) and vortex shortly to mix
- blank UV spec. against ddH_2O
- measure A_{260} and A_{280} (make sure that A_{260} reading is between 0.1 and 1.0!!!)

A_{260} x 100 (dilution factor) x 50 $^{ng}/_{\mu L}$ = $^{ng\ DNA}/_{\mu L}$ in undiluted sample

You can expect concentration values between 400 and 500 $^{ng}/_{\mu L}$

(Roche plasmid kit, 4mL cell culture, 80µL elution buffer)

A_{260}:A_{280} ratio as a purity criteria

--> A_{260} Absorption of nucleic acids (and weakly of proteins)

--> A_{280} Absorption of proteins (and weakly of nucleic acids)

Rule of thumb: DNA 1.8

RNA 2.0

(Roche kit normally gives you 1.9 for plasmid DNA)