Extraction of DNA from mouse tail biopsies

- the whole procedure is done in Eppendorf vials
- cut tail with a scalpel into pieces and add 710µl Tris-buffer (50mM Tris.HCL, pH 8.0; 100mM NaCl; 1% SDS)
- add 35µl Proteinase K (10mg/ml)
- incubate over night at 57°C (mild shaking)
- strong shaking for 5 min
- add 250µl 6M NaCl for cell lysis
- strong shaking for 5 min
- centrifuge for 10 min at max. speed
- transfer of 800µl supernatant in an new vial without touching the pellet
- add 500µl isopropanol and shake mild for 2 min until DNA precipitates
- centrifuge for 10 min at max. speed
- reject supernatant and wash pellet with 70% cold ethanol (removal of salt)
- centrifuge for 5 min at max. speed
- reject supernatant, turn vial opened bottom side up and let the DNA dry at room temperature until the alcohol is evaporated
- resuspend pellet in TE buffer (10mM Tris-HCL pH 8.0; 1mM EDTA pH 8.0) at 37°C for about 2h with mild shaking (be sure that DNA pellet is dissolved!); volume of buffer depends of DNA amount and is usually 200µl; quantify amount of DNA by determination of UV signal (260nm) of 5µl DNA in 495µl TE buffer (1:100 dilution) against TE buffer as reference; store DNA at –20°C