





Workshop - Archaeobotany & Integration of Genetics with Archaeobotany/12.-13.06.2017/

## PROTOCOL 3.

## <u>Quantification of DNA</u>

## Things to be done before the start:

- Mix DNA samples well by integrated vortexer to achieve an accurate homogeneity of samples
- Let the samples and buffers to set to room temperature
- 1) Turn on NanoPhotometer® P330 using on/off Key
- 2. Press 1 for NanoVolume option
- 3. Press 1 for Nucleic Acids option
- 4. Press 1 for dsDNA option
- 5. Select Lid of the NanoPhotometer® P-Class Submicroliter Cell (usually blue Lid /factor 5/)
- 6. Switch on the Background correction at 320 nm
- 7. Press Sample Key
- 8. Insert the NanoPhotometer® P-Class Submicroliter Cell into the cell holder with the cell windows facing the light beam (Implen® logo have to be faced to the front). Pipette 4,0 µl AE or EB buffer onto the centre of the measuring window and cover with a blue Lid
- 9. Press Blank Key
- 10. Remove Lid and use Kleenex to wipe the inside of the lid and the top of the Submicroliter Cell
- 11. Pipette 4,0 µl of DNA sample onto the centre of the measuring window and cover with red Lid
- 12. Press Sample Key. Read concentrationand A260/280 value (have to be between 1,6 i 2,0)
- 13. Repeat steps 9-11 for every new DNA sample
- 14. Measure λ DNA sample of known concentration (c=100 ng/μl) as the last but one sample
- 15. Measure ddH2O as the last sample
- 16. Use Kleenex to wipe the inside of the lid and the top of the Submicroliter Cell
- 17. Press several times Escape key to reach start menu (NanoVolume option)
- 18. Turn off NanoPhotometer and insert Submicroliter Cell into the storage box

## Laboratory equipment and accessories used for DNA quantification







Workshop - Archaeobotany & Integration of Genetics with Archaeobotany/12.-13.06.2017/



NanoPhotometer® P330



Submicroliter Cell and Lids



DNA quantification steps