

Rapid, Efficient Clean-Up of failed DNA Samples using the NEW DCU Clean-Up Kit

In brief, five low-quality 100ul DNA samples (A-E) underwent recovery using the DCU clean-up kit, following the kit protocol for recovery and concentration of low-quality samples, eluting into 100µl of DNA Rehydration Buffer. Samples were analysed for yield using a fluorometric assay specific to DNA, and purity via UV spectrophotometry. Samples were analysed both before and after the clean-up process with the results compared in order to determine the performance of the DCU kit.

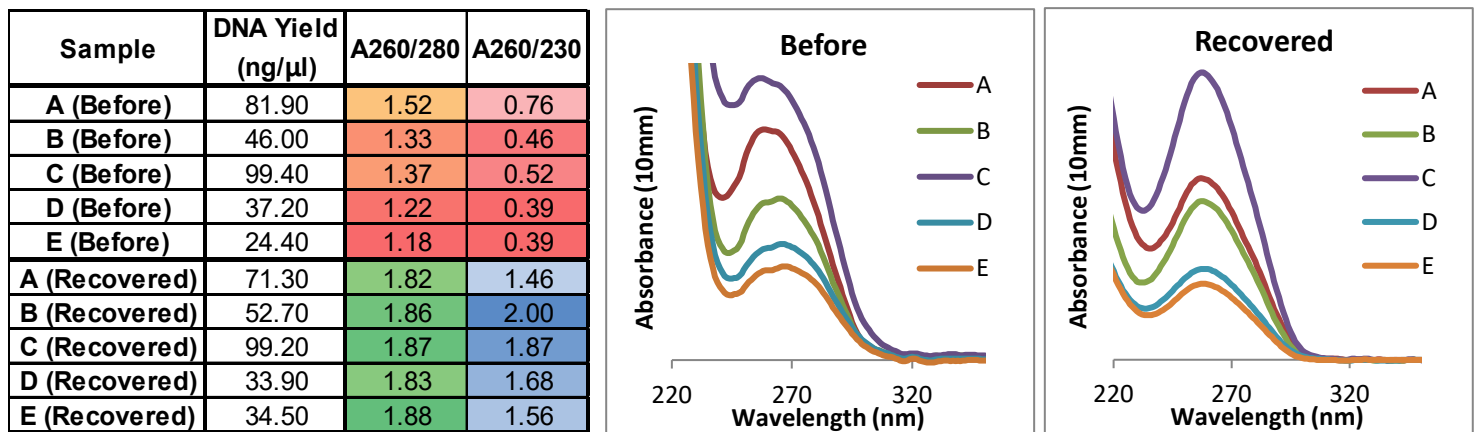


Figure 1: Table and UV spectra of DNA yield, A260/280, and A260/230 purity of samples before and after recovery using the DCU Clean-up Kit.

Following clean-up using the DCU kit, the A260/280 and A260/230 purities of samples were significantly improved (Figure 1), recovering samples that would otherwise be rejected and making them suitable for downstream applications such as PCR/qPCR, sequencing, or genotyping. Recovered samples showed on average a 41% increase in 260/280, and a 262% increase in 260/230 purity. In addition, sample yields were not significantly affected by the recovery process; DCU efficiently separates precious DNA samples from contaminants and inhibitors.

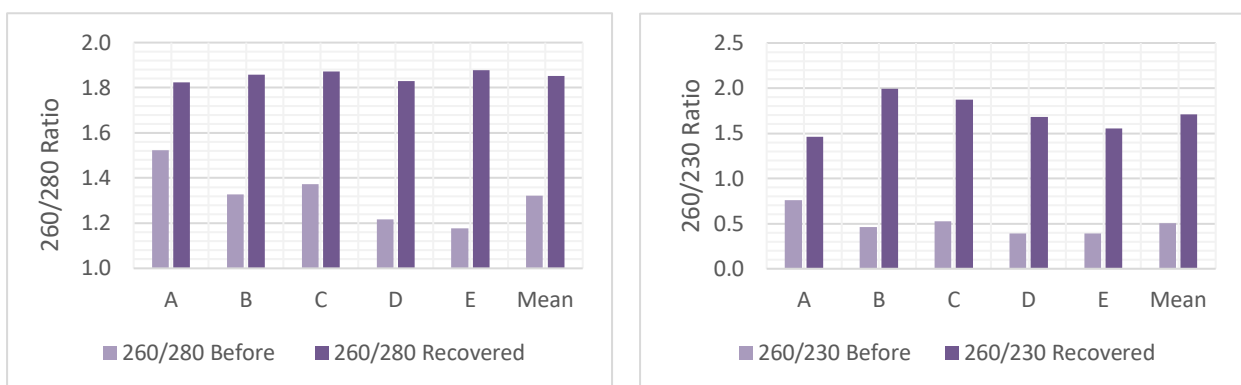


Figure 2: Bar chart comparison of A260/280 and A260/230 purities of samples both before and after clean-up using the DCU kit.

- **NEW DCU Clean-Up kit allows for rapid recovery of low-quality DNA samples that would normally fail QC, avoiding costly re-sampling and purification.**
- **DCU effectively removes contaminants whilst maximising recovery of valuable DNA samples.**
- **No columns or additional solvents needed; the DCU kit can be used straight out of the box.**