Last Update: 22 March 2023

UVP lamp (model UVGL-25)

The lamp can emit UV light centred around 254 and 366 nm which may be switched by applying short- and long-wavelength settings, respectively. It is used as the source of UVC and UVA. UVB can be found in Spectroline TE-312S UV Transilluminator

Preparation

Use Homemade quartz tube (inner cross-section size: 2 × 4 mm) for holding liquid in place. Unlike a glass tube, the quartz tube is transparent in the UV spectrum, thus suitable for UV irradiation

1. Dilute the sample to 2 nM 20 – 40 μL using MES buffer and keep the solution in quartz tubes
2. If there is any additive to the DNA solution, add it. For example, mix saturated TP1 solution with DNA solution for a final volume ratio of TP1 solution to mixture at 1:10
3. Find the partial cut pipette tip box for 20 μL tips. Attach the quartz tubes to the back side of the covering

UV Irradiation

Place the pipette tip box with tubes at about 1 cm in front of the UV source.

1. The timer could be set by on the AC power or just by phone/computer
2. In order to avoid all other lights, cover the box and the UV source with opaque material'