

## Protocol No. 4

### Staining Protocol: SYBR / EtBr

#### SYBR Green or Gold:

1. 5  $\mu$ l or the undiluted dye (as delivered by manufacturer) is diluted in 50 ml of distilled water (ddH<sub>2</sub>O).  
**Note:** SYBR dyes bind glass → use a plastic container to prepare the staining solution.
2. Add the staining solution and the gel to the Easy Stain Gel Tray (Elchrom P/N 2344 or 2344-L) and stain for approximately 20 to 45 minutes on a shaker at low speed. The precise staining time will depend on the DNA concentration of the samples.  
**Note:** SYBR dyes are light sensitive → protect the staining solution from light.
3. Optional: destain the gel in destaining solution (Elchrom P/N 3037 diluted in ddH<sub>2</sub>O) for up to 45 minutes depending on the background.
4. Visualise the bands on a UV-transilluminator (254 nm, appropriate filter fitted).

#### Ethidium Bromide (EtBr):

1. Dilute the EtBr in ddH<sub>2</sub>O to a final concentration of 0.5  $\mu$ g/ml.
2. Add the staining solution and the gel to the Easy Stain Gel Tray (Elchrom P/N 2344 or 2344-L) and stain for approximately 20 to 45 minutes on a shaker at low speed. The precise staining time will depend on the DNA concentration of the samples.  
**Note:** EtBr is light sensitive → protect the staining solution from light.
3. Optional: destain the gel in destaining solution (Elchrom P/N 3037 diluted in ddH<sub>2</sub>O) for up to 45 minutes depending on the background.
4. Visualise the bands on a UV-transilluminator (254 nm, appropriate filter fitted).