

Protocol for Staining DNA in Polyacrylamide Gels Using Ethyl Violet

From: Cong et al. (2010) A visible dye-based method for DNA in polyacrylamide gels by ethyl violet. *Analytical Biochemistry* **402**: 99-101.

Materials Needed:

Dish for gel

Distilled water pH 6→8.

0.4 % ethyl violet solution in 90% ethanol

50% ethanol solution

white background/light box

1. Run DNA on a TBE polyacrylamide gel.
2. About 5 minutes before completing gel run dilute the 0.4% ethyl violet stock solution to a working concentration of 0.0008% in distilled water.

For 100 mL

200 μ L of 0.4% ethyl violet

100 mL of distilled water

3. After gel has finished running remove gel from glass plates and place in the 0.0008% ethyl violet solution for 20 minutes to stain.
4. After a 20 minute incubation remove the staining solution and wash the gel in 50% ethanol for 1 minute.
5. Remove the 50% ethanol (can save for multiple destains) wash the gel for 1 minute with distilled water.
6. Image DNA bands.

0.4% Ethyl Violet Stock Solution:

100 mL of 90% ethanol

400 mg of Ethyl Violet

Place in foil wrapped bottle for storage.