FireRuth Staining Protocol

Materials

Contents

FireRuth fluorescence protein gel stain (concentrate)
Staining Protocol

Required Materials

99% Ethanol
Acetic acid
Ultra pure water

1. Fixing - After electrophoresis place the gel (7x8 cm) into a clean tray with 100 ml of the Fixing solution (30 % Ethanol, 10% acetic) for at least 30 minutes or over night.
2. Ethanol wash 3x - Wash the gel in 20% ethanol for 30 min, repeat 3 times.
3. Prepare staining solution: 2µl dye solution in 100ml 20% ethanol
   Note: the dye is light sensitive! Store the dye and the gel from this step in the dark.
4. Staining - Incubate the gel in use FireRuth staining solution for 6h.
5. Water wash 2x – Wash the gel for 5 minutes with 50 ml of ultra pure water, repeat once.
6. Destaining - Destain the gel with 40% ethanol, 10% acetic acid for 15h.
7. Wash 2x 10 min in ultra pure water
8. Storage – Store the gel in ultra pure water.
9. Scan the gel (The fluorescence dye has two excitation maxima, one at ~280 nm and one at ~450 nm, and has an emission maximum near 680 nm. Proteins stained with the dye can be visualized using a 300 nm UV transilluminator, blue-light transilluminator, or laser scanner.)

Note: all % are in v/v. Shake the gel during the process gently. Store dye cool and dark!