

ZnSO₄ staining of SDS-PAGE gels

(Steinert lab)

Method is about 5-10 x more sensitive compared to Coomassie Blue R 250, but less sensitive than silver stain. Due to sensitivity, clean glass plates well before preparing gel and wear gloves all the time to avoid keratin contamination on glass surface. Also, rinse gel chamber well before running gel.

Procedure:

1. Soak gel 10 for min. in 1 % Na₂CO₃. Do not rinse.
2. Soak gel in 0.2 M imidazole, 0.1 % SDS for 15 min., wash briefly (2 x 10 sec.) in 0.2 M imidazole.
3. Stain with 0.2 M ZnSO₄ for 20-30 sec. until bands become clearly visible. Stop staining reaction with water.
4. Destain (reduce) with 0.1 M citric acid.

Bands appear “negative”.