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1D Gels

1. Add appropriate amount of 1D sample buffer to your aliquot of unknown protein.

For Coomassie stained gels, detection limit is 1 µg.
For Sypro or Silver stained gels, the detection limit is 1 ng.
For standard gel, load 5-15 µg / lane.

Put in a 95°C shaker for 5 minutes. Add β–ME to sample buffer just prior to adding to sample.

Add 50 µL β–ME to 950 µL of sample buffer.

2. Remove comb, wrapping, and sticker from Criterion gel and place in gel box.

3. Fill the upper chamber and lower chamber (to the fill line) with 1X SDS PAGE Buffer (0.25M Tris Base, 1.92M Glycine, 1% SDS).

4. Load 5 µL appropriate of molecular weight marker to lane 1 and 18 using a gel loading pipette tip. Be careful not to disturb the gel box during loading so that the samples will not float out of the wells.

5. Load 30 µL of sample to each lane.

6. Carefully put the lid on the gel box (red-red; black-black) and plug the electrodes into the power source. Set the voltage to 200 V. Let the gel run until the dye front just runs off the gel.

7. Remove gel from the gel box and empty upper chamber. Crack open the plastic casing and lay gel in staining tray.

8. Briefly wash gel with water three times and then follow the corresponding instructions for the stain of your choice.