"Blue-Silver" Coomassie Staining

A High sensitivity Coomassie G-250 Staining procedure.

This is a modified Neuhoff procedure as adapted in *Electrophoresis 2004, 25, 1327-1333*.

If the gel is to be used for in gel trypsin digestion and protein identification, see the general gel handling procedures described in the In Gel Digestion procedures.

Materials

- Milli-Q water
- Phosphoric Acid
- Ammonium Sulphate
- Methanol
- G-250 Coomassie

The **staining solution** is prepared as follows and can be stored at Room temperature for > 6months.
For 1 L of Staining Solution:

- To 100 ml water add phosphoric acid (enough to obtain 10% in the final 1L).
- Add 100 g ammonium sulphate.
- Add 1.2g Coomassie Blue G-250.
- Add water to 800 mL.
- Add 200 mL of 100% methanol.

Procedure

1. Fix gel in 50% ethanol and 2% phosphoric acid.
2. Wash the gel for 2x 20 minutes in ddH_2O.
3. Add staining solution and stain overnight or longer.
4. Rinse the gel with ddH_2O and store in ddH_2O at 4°C until further use (drying or for protein ID).

Note: Be sure to dispose of all methanol containing solutions appropriately. Methanol should never be disposed of down the drain.