Colloidal Coomassie Staining Protocol

Reagents:

Fixing Solution:  
40% methanol, 7% acetic acid
53 mL MilliQ water
40 mL methanol
7 mL acetic acid

Staining Solution:  
1X Brilliant Blue G-Colloidal Coomassie
800 ml MilliQ water to concentrate.
*Mix by inversion. Store at 4°C. 
(Product no. B 2025, SigmaAldrich)

Destaining Solution 1:  
10% acetic acid, 25% methanol
65 mL MilliQ water
10 mL acetic acid
25 mL methanol

Destaining Solution 2:  
25% methanol
75 mL MilliQ water
25 mL methanol

Storage solution:  
25% ammonium sulfate
75 mL MilliQ water
25 mL ammonium sulfate

Procedure:

*Use clean polypropylene containers, best if rinsed with ethanol before use

1. After electrophoresis, fix proteins for 1 hour in fixing solution.

2. Immediately before staining, combine 4 parts of the 1X working solution and 1 part methanol. Vortex for 30 seconds to mix. This solution is stable for 4 hours.

3. Place gel in staining solution for 1-2 hours or overnight.

4. Place gel in destaining solution 1 for 60 seconds while rocking. *For gels >1.5 mm thick, destaining time may be reduced to 10-30 seconds.

5. Rinse the gel with 25% methanol, discard, and destain in 25% methanol for up to 24 hours.

6. Scan gel at 600 nm. If necessary, store gel in 25% ammonium sulfate at room temperature for up to 3 weeks.