

COOMASSIE STAIN WITH $\text{Al}_2(\text{SO}_4)_3$ FOR MASS-SPEC

(reference: Kang et al., 2002, *Bull. Korean Chem. Society* 23:11 p1511-12.)

MATERIALS:

EthOH

Acetic Acid

$\text{Al}_2(\text{SO}_4)_3 \cdot \text{H}_3\text{PO}_4$ stock solution

102g $\text{Al}_2(\text{SO}_4)_3 \cdot 18\text{H}_2\text{O}$ (Sigma 227617)

22.2 ml 85% H_3PO_4 (sigma 215104)

miliQ H_2O

Dissolve $\text{Al}_2(\text{SO}_4)_3$ in ~700ml H_2O , add acid, bring to 1L and filter 0.45um.

2% Coomassie Blue G250 stock

G250 (Biorad 161-0406)

miliQ H_2O

Add 1g G250 to 50ml H_2O , heat gently with stirring to help dissolve.

Protocol:

1. Fix gels: 25% EtOH 7% Acetic Acid in H_2O ~20min RT°.
2. Make stain fresh in a clean bottle or conical, adding ingredients in the listed order. Stain only long enough to see bands.
 - a. 90ml $\text{Al}_2(\text{SO}_4)_3$
 - b. 1ml G250 Coomassie
 - c. Mix a and b and then add 10ml EtOH 100% and mix quickly.
3. Destain in 7% acetic acid in H_2O