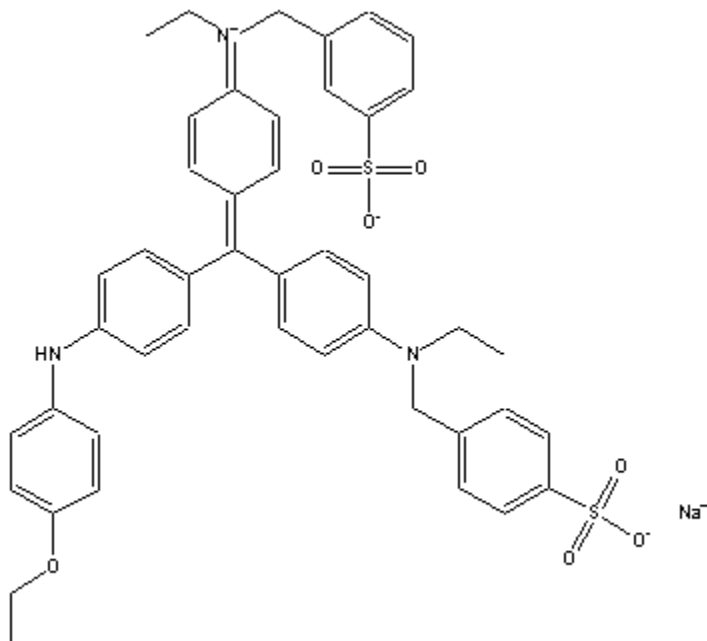


Catalog Number: 821616, 821636

Coomassie* Brilliant Blue R-250, Electrophoresis Grade

Structure:



Molecular Formula: $C_{45}H_{44}N_3O_7S_2Na$

Molecular Weight: 825.99

CAS # : 6104-59-2

Synonyms: C. I. # 42660; Acid blue 83

Physical Description: Purple to brown powder

Recommended Storage: Room temperature

Solubility: Soluble in water (70 mg/ml), ethanol (10 mg/ml), methanol

λ_{max} : 585 nm in ethanol

Description: Most commonly used stain in protein electrophoresis. A fast acting, sensitive dye which can be used on SDS gels, IEF gels, and standard

gels.

Typical Coomassie Solution:

Prepare in distilled, deionized water:

- 50% (v/v) methanol
- 0.05% (w/v) Coomassie Brilliant Blue R-250
- 10% acetic acid
- 40% Water

Dissolve the Coomassie Brilliant Blue R in methanol before adding acetic acid and water (filtration is not generally needed). Solution can be stored for 6 months. If precipitate is observed following prolonged storage, filter to obtain a homogeneous solution.

General Protein Staining Procedure:¹

1. Cover the polyacrylamide gel with 3 to 5 volumes of a fixing solution (50% [v/v] methanol, 10% [v/v] acetic acid; 40% water). Agitate slowly 2 hours on an orbital shaker.
2. Remove the fixing solution and cover the gel with the Coomassie Brilliant Blue solution from above. Slowly agitate on the orbital shaker for 4 hours.
3. Remove the staining solution and rinse the gel briefly with fixing solution.
4. Remove the fixing solution and cover the gel with a destaining solution (7% acetic acid; 5% methanol; 88% water). Slowly agitate on the orbital shaker for 2 hours. Remove the destaining solution. Repeat with fresh destaining solution until blue bands and a clear background appear.
5. The gel can then be stored in 7% acetic acid, water, or dried for storage.

Availability:

<i>Catalog Number</i>	<i>Size</i>
821616	25 gm
821636	100 gm

References:

1. *Short Protocols in Molecular Biology*, **2nd Ed.**, Ausubel, F.M, et. al. (Eds.), Greene Publishing Associates and John Wiley and Sons, New York, 1992, pp. 10-27, 10-28.
2. *Biochem. Biophys. Acta.*, **v. 71**, 377 (1963).
3. *Anal. Biochem.*, **v. 20**, 150 (1967).
4. Diezel, W., Kopperschlager, G., Hoffmann, E., *Anal. Biochem.*, **v. 48**, 617-620 (1972).

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