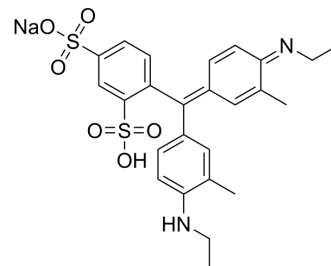


Xylene Cyanol FF

Cat. No.:	HY-D0945
CAS No.:	2650-17-1
Molecular Formula:	C ₂₅ H ₂₇ N ₂ NaO ₆ S ₂
Molecular Weight:	538.61
Target:	Fluorescent Dye
Pathway:	Others
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



BIOLOGICAL ACTIVITY

Description	Xylene Cyanol FF is an acid triphenylmethane dye. Xylene Cyanol FF can be used for histochemical staining of hemoglobin peroxidase or as a tracking dye for DNA sequencing in electrophoresis. Xylene Cyanol FF will be catalyzed by Fe and Al to accelerate oxidation under the addition of double oxidant hydrogen peroxide and potassium periodate. Xylene Cyanol FF thus enables the spectrophotometric determination of Fe and Al in the solution to be tested ^{[1][2]} .
In Vitro	<p>Xylene Cyanol FF tracks DNA on different polyacrylamide gels. The operation is as follows^[1]:</p> <ol style="list-style-type: none"> Used for denaturing gel. <ol style="list-style-type: none"> Prepare gel: Contain 10% acrylamide (19:1, acrylamide:bisacrylamide), and 8.3 M urea. The operating condition is 55°C. Prepare electrophoresis buffer: 89 mM Tris, HCl, pH 8.0, 89 mM boric acid, 2 mM EDTA (TBE). Prepare loading buffer: 10 mM NaOH, 1 mM EDTA, and 0.1% Xylene Cyanol FF. Gel is run at 70 W (50 V/cm, constant power) on an IBI model STS 45 electrophoresis unit, or 60 °C (31 V/cm, constant voltage) on a Hoefer SE 600 electrophoresis unit. Dry the gel on Whatman 3MM paper and expose to X-ray film. Exposure time up to 15 hours. Used for denaturing gel. <ol style="list-style-type: none"> Prepare the gel: Contain 8% acrylamide (19:1, acrylamide:bisacrylamide). Prepare DNA suspension: containing 40 mM TrisβHCl, pH 8.0, 20 mM acetic acid, 2 mM EDTA and 12.5 mM magnesium acetate (TAEMg). Boil the DNA suspension and cool slowly to 16 °C. Prepare staining solution: containing TAEMg, 50% glycerol, 0.02% bromophenol blue and 0.02% Xylene Cyanol FF. Bring up the sample to a final volume of 10 μL with this staining solution. The gel is run on a Hoefer SE-600 gel electrophoresis unit at 11 V/cm at 16 °C and exposed to X-ray film for up to 15 hours or stained with Stainsall (HY-D0987). <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Li X, et al. Antiparallel DNA double crossover molecules as components for nanoconstruction. *Journal of the American Chemical Society*, 1996, 118(26): 6131-6140.
- [2]. Cai L, et al. Determination of iron and aluminum based on the catalytic effect on the reaction of xylene cyanol FF with hydrogen peroxide and potassium periodate[J]. *Journal of the Brazilian Chemical Society*, 2011, 22: 1987-1992.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA