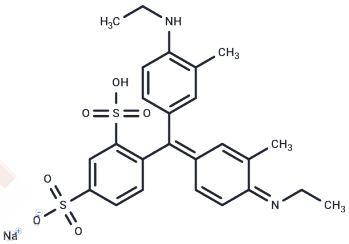
Data Sheet (Cat.No.T87648)

TargetMol

Xylene Cyanol FF

Chemical Properties



CAS No. : 2650-17-1

Formula: C25H27N2NaO6S2

Molecular Weight: 538.61

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Xylene Cyanol FF, an acid triphenylmethane dye, is utilized for histochemical staining of hemoglobin peroxidase and as a tracking dye for DNA sequencing during electrophoresis. Catalyzed by Fe and Al, it accelerates oxidation with hydrogen peroxide and potassium periodate, enabling spectrophotometric determination of Fe and Al in solutions [1] [2].
Targets(IC50)	Others
In vitro	Xylene Cyanol FF is utilized to trace DNA in various polyacrylamide gel electrophoresis setups. [1] The procedures are as follows: 1. For denaturing gels: (1) Prepare a gel consisting of 10% acrylamide (19:1 acrylamide:bisacrylamide) and 8.3 M urea, running it at 55°C. (2) Prepare the electrophoresis buffer using 89 mM Tris, HCl at pH 8.0, 89 mM boric acid, and 2 mM EDTA (TBE). (3) Prepare the loading buffer with 10 mM NaOH, 1 mM EDTA, and 0.1% Xylene Cyanol FF. (4) Run the gel on an IBI model STS 45 apparatus at 70 W (50 V/cm, constant power) or on a Hoefer SE 600 apparatus at 60°C (31 V/cm, constant voltage). (5) Dry the gel on Whatman 3MM paper and expose it to X-ray film for up to 15 hours. 2. For another denaturing gel method: (1) Prepare a gel containing 8% acrylamide (19:1 acrylamide:bisacrylamide). (2) Make a DNA suspension with 40 mM Tris-HCl at pH 8.0, 20 mM acetic acid, 2 mM EDTA, and 12.5 mM magnesium acetate (TAEMg). (3) Boil the DNA suspension and cool slowly to 16°C. (4) Prepare a dye solution with TAEMg, 50% glycerol, 0.02% bromophenol blue, and 0.02% Xylene Cyanol FF to adjust the sample to a final volume of 10 µL. (5) Run the gel on the Hoefer SE-600 apparatus at 11 V/cm and 16°C, and expose it to X-ray film for up to 15 hours or stain with Stainsall dye. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8566 mL	9.2832 mL	18.5663 mL
5 mM	0.3713 mL	1.8566 mL	3.7133 mL
10 mM	0.1857 mL	0.9283 mL	1.8566 mL
50 mM	0.0371 mL	0.1857 mL	0.3713 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.