

FluoProbes 655

Product Description

Name: FluoProbes 655

Catalog Number: FP-FL6820 1 mg

Molecular Weight: MW= 446.50

Solubility: Chloroform, Alcohol, DMF, DMSO

(insoluble in water)

Absorption / Emission : $\lambda_{\text{exc}} \setminus \lambda_{\text{em}}$ (BSA) = 652/672nm

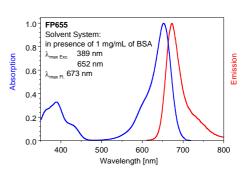
 $\lambda_{\text{exc}} \setminus \lambda_{\text{em}}$ (Chloroform) = 391, 652/672nm

 $\lambda_{\text{exc}} \setminus \lambda_{\text{em}} \text{ (MeOH)} = 628/654 \text{nm}$

 $\lambda_{exc} \lambda_{em}$ (Phosphate bufferpH 7,4) = 622/644nm

EC (M^{-1} cm⁻¹): EC (Chloroform) = 177 000

Storage: -20°C Protect from light and moisture



Introduction

FluoProbes 655 is one of the most sensitive probes currently on the market for the detection of proteins. These dye has extremely low quantum yields in aqueous solution and quantum yields of up to 80% when non-covalently bound to proteins. Up to a several hundred-fold increase of the fluorescence intensity has been observed upon binding to proteins, which makes it perfectly suited for gel and capillary electrophoresis applications.

Directions for use

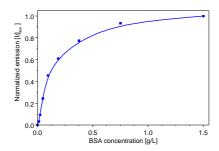
Guidelines for use

The FluoProbes 655 is perfectly excitated with 380 nm, 405 nm and 635 nm diode lasers. Allow the gel to float freely in sufficient volumes of stain, fixing and destain solutions. Typically, 35-50 ml is sufficient for an 8 x 8 cm gel and 75-100 ml is sufficient for a 13 x 9 cm gel.

Additional Materials Required

- Gel Fixing Solution: 40% ethanol (v/v), 10% (v/v) acetic acid in ultrapure water
- Destaining Solution: 5% (v/v) acetic acid in ultrapure water

FT-FL6820



Normalized emission of FluoProbes 655 in BSA solutions: Intensity vs. BSA concentration

Standard Procedure for Staining Gels

- 1- Prepare stock solution of FluoProbes 655 Protein Stain with solvant like DMSO or DMF. For a typical reaction, dissolve 1 mg of dye in 0.5 mL of DMF or DMSO. Briefly sonicate or vortex.
- 2- Allow the stock solution to reach room temperature and dilute 1000-fold with ultrapure water (*New product : optimal dilution is still to be determined*). Prepare just enough reagent for the gel(s) being stained.
- 3- Remove the gel(s) from the gel cassette or plates. Place gel in a clean tray with a sufficient volume of Gel Fixing Solution to immerse the gel. Cover the tray, and place it on a rocker or shaker and gently agitate for 30 minutes.
- 4- Decant the fixing solution. Add more fixing solution and agitate gently for another 30 minutes.
- 5- Carefully decant the fixing solution. To remove residual solution from the gel, add ultrapure water to the tray and agitate the gel for 5 minutes.
- 6- Carefully decant the water and add a sufficient volume of diluted Protein Stain to immerse gel. Cover the tray with aluminum foil to minimize light exposure. Place tray on a shaker and agitate gel for 1 hour. Staining for 2 hours to overnight may improve band development for some proteins.
- 7- Carefully decant the stain solution. Add the Destaining Solution, cover the tray and agitate gently for 5 minutes.
- 8- Remove the Destaining Solution and replace with an equal volume of ultrapure water. Gently agitate for 15 minutes.
- 9- Carefully decant water and replace it with more ultrapure water. Agitate the gel gently for 15 minutes. 10- For best results, detect bands using visible laser-based imagers equipped with 380 nm, 405 nm, 635 nm or 655 nm diode lasers. The optimum emission filter is 670 nm. The gel can be imaged on any platform with the respective excitation and emission filters.

Other protein gel stain protocol may be tested for this new dye.

Technical and scientific information

Related / associated products and documents

See BioSciences Innovations catalogue and e-search tool.

• TG-SDS 10X solution, UP914957

Ordering information

Catalog size quantities and prices may be found at www.interchim.com/

Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask: FluoProbes® / Interchim; Hotline: +33(0)4 70 03 73 06

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