

PRODUCT INFORMATION



CGamF

Item No. 40792

CAS Registry No.: 168912-70-7

Formal Name: (3 α ,5 β ,7 α ,12 α)- N-[2-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]-2-oxoethyl]-3,7,12-trihydroxy-

Synonyms: Cholyglycylamidofluorescein, FITC-glycocholate, FITC-GC

MF: C₄₆H₅₄N₂O₁₀

FW: 794.9

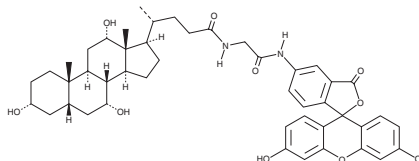
Purity: $\geq 95\%$

Ex./Em. Max: 492/515 nm, in aqueous solution at pH 7.4

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥ 2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CGamF is supplied as a crystalline solid. A stock solution may be made by dissolving the CGamF in the solvent of choice, which should be purged with an inert gas. CGamF is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

CGamF is a fluorescent probe for hepatic bile acid transport that is composed of cholic acid (Item No. 20250) conjugated *via* a glycylamino linkage to fluorescein.^{1,2} It displays excitation/emission values of 492/515 nm, respectively, in aqueous solution at pH 7.4.² CGamF fluorescence intensity increases as pH increases upon excitation at 495 nm but is pH-independent upon excitation at 440 nm. CGamF uptake by hepatocytes becomes sodium-dependent as CGamF concentration increases, with lower sodium levels resulting in reduced uptake.^{1,2} CGamF has been used in the study of hepatic transporter-mediated drug interactions and toxicity *in vitro*.^{3,4}

References

1. Kitamura, T., Gatmaitan, Z., and Arias, M. Serial quantitative image analysis and confocal microscopy of hepatic uptake, intracellular distribution and biliary secretion of a fluorescent bile acid analog in rat hepatocyte doublets. *Heptaology* **12**(6), 1358-1364 (1990).
2. Maglova, L.M., Jackson, A.M., Meng, X.J., *et al.* Transport characteristics of three fluorescent conjugated bile acid analogs in isolated rat hepatocytes and couplets. *Heptaology* **22**(2), 637-647 (1995).
3. El-Mir, M.Y., Serrano, M.A., Macias, R.I.R., *et al.* *In vitro* test to determine the effect of cytostatic drugs on co-cultured rat hepatocytes and hepatoma cells. *Int. J. Exp. Path.* **79**, 109-115 (1998).
4. Ye, Z.-W., Pelt, J.V., Camus, S., *et al.* Species-specific interaction of HIV protease inhibitors with accumulation of cholyglycylamido-fluorescein (CGamF) in sandwich-cultured hepatocytes. *J. Pharm. Sci.* **99**(6), 2886-2898 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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