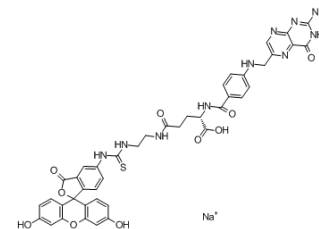


EC-17 disodium salt

Cat. No.:	HY-13615A
CAS No.:	910661-33-5
Molecular Formula:	C ₄₂ H ₃₆ N ₁₀ NaO ₁₀ S+
Molecular Weight:	895.85
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description	EC-17 (disodium salt) is a folate receptor alpha (FRα) targeting contrast agent with fluorescent properties in the visible light spectrum. The peak excitation and emission wavelengths of EC-17 are 470/520 nm.
IC₅₀ & Target	Folate receptor alpha ^[1]
In Vitro	EC-17 contains the fluorescein fluorochrome and has a spectral wavelength of 490–530 nm. EC-17 is synthesized by a folate (vitamin B9) and fluorescein isothiocyanate (FITC) conjugated through an ethylenediamine spacer to produce folate-FITC, with a molecular weight of 917 kDa. FITC is a derivative of fluorescein functionalized with an isothiocyanate reactive group. The folate-FITC conjugate forms a negatively charged fluorescent molecule that specifically targets cell-surface FR α and is subsequently internalized into the cytoplasm. The signal-to-background ratio (SBR) of EC-17 for HeLa cells range from 0.97 to 7.32 depending on the molarity and concentration of cancer cells ^[1] .
In Vivo	The mean fluorescence signal from the animals injected with EC-17 to be 42,234 \pm 12,234 au ^[1] . Fluorescence microscopy for folate-FITC shows a strong signal in all malignant tumors with FR- α expression and no signal in FR- α -negative malignant or benign lesions ^[2] .

PROTOCOL

Cell Assay ^[1]	KB, HeLa, and TC1 cells are plated on a cell culture treated 6-well plate and incubated for 16 hours. Once confluent, EC-17 is added cells. The cells are incubated and sealed in a light-protected environment for 45 minutes. Cells are then washed 3 times with PBS and plated and underwent fluorescence microscopy ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Administration ^[1]	Mice ^[1] Mice are injected subcutaneously in the flank with 1.2 \times 10 ⁶ TC1 cells (C57BL/6 mice), 1.0 \times 10 ⁶ HeLa cells (NOD.Cg-Prkdc ^{scid} Il2rg ^{tm1Wjl/Szj} mice), or 1.0 \times 10 ⁶ KB cells (NOD.Cg-Prkdc ^{scid} , Il2rg ^{tm1Wjl/Szj} mice). Once tumor volume reached approximately 300 mm ³ half of the mice are injected with 0.1 mg/kg of EC-17 and the other half with 0.1 mg/kg of OTL38 via tail vein. Three hours later, the fluorescence of tumors is measured using Flocam ^[1] .

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Tummers QR, et al. Intraoperative imaging of folate receptor alpha positive ovarian and breast cancer using the tumor specific agent EC17. Oncotarget. 2016 May 31;7(22):32144-55.

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