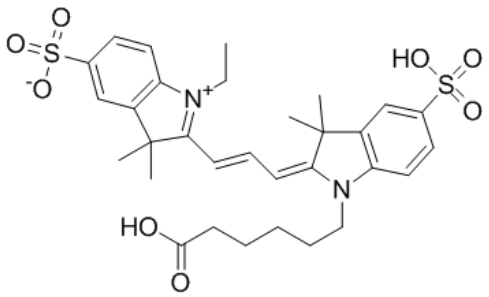
Product Data Sheet

Product Name: Cy3 carboxylic acid
Cat. No.: GC30184

Chemical Properties

Cas. No.	146368-13-0		
SMILES	CC(/C(N1CCCCCC(O)=O)=C\C=C\C2=[N+](CC)C(C=CC(S([O-])(=O)=O)=C3)=C3C2(C)C)(C)C4=C1C=CC(S(=O)(O)=O)=C4		
Formula	$C_{31}H_{38}N_2O_8S_2$	M.Wt	630.77
Solubility	Water : 16 mg/mL (25.37 mM)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

Zy3 carboxylic acid (Compound 7c) is a novel cyanine dyes with vinylsulfone group for labeling biomolecules with maximum wavelength (λabs) and emission maximum wavelength (λem) of 549 nm and 566 nm, respectively.

To ensure labeling efficiency, whether there is any effect from the difference in the length of the spacer is determine. For the 550 nm range, 7a, Zy3 carboxylic acid (Compound 7c), 7f, and 7g

having five, six, eight, and eight carbon atoms in the spacer, respectively, are chosen. For the spacer-dependent reactivity test, dyes with the highest extinction coefficients (7g, 7l, and 7n) and those with ethyl groups as R on indole (7a, Zy3 carboxylic acid, 7f, and 7i) are selected. As a result, dyes with longer spacers are observed to have aster binding affinity to BSA. Among 7a, Zy3 carboxylic acid, 7f, and 7g, with the same absorption wavelength at ~550 nm (m=1)[1].

[1]. Park JW, et al. Novel cyanine dyes with vinylsulfone group for labeling biomolecules. Bioconjug Chem. 2012 Mar 21;23(3):350-62.

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA