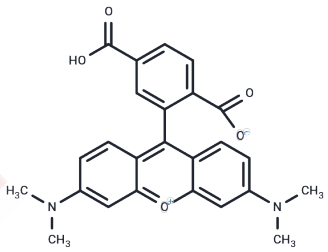
Data Sheet (Cat.No.T18905)

TargetMol

6-TAMRA

Chemical Properties



CAS No. : 91809-67-5

Formula: C25H22N2O5

Molecular Weight: 430.45

Storage: Keep away from direct sunlight
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	6-TAMRA (6-Carboxytetramethylrhodamine) serves as a popular fluorophore for the creation of bioconjugates, particularly in the synthesis of fluorescent antibodies and avidin derivatives employed in immunochemistry.
Targets(IC50)	Others,Autophagy
In vitro	6-TAMRA labeled nucleotide experiment Operation steps 1. Sample treatment: Incubate in NHOH/methylamine (1:1) solution at 65°C for 10 minutes to separate oligonucleotides from CPG. 2. Take the supernatant and wash CPG with 1 mL EtOH/MeCN/H2O (3:1:1). 3. Mix the supernatants and dry them. 4. Treat with fresh anhydrous triethylammonium fluoride/n-methylpyridone (250 µL, n-methylpyridone 1.5 mL, triethylamine 750 µL, tea-3hf 1.0 mL) at 65°C for 1.5 h to remove t-butyl-dimethylsilyl protecting groups from RNA residues, and add 25 µL 3 M NaOAc and 1 mL n-BuOH to precipitate oligonucleotides. 5. The sample was cooled at -70°C for 1 h and then centrifuged at 10,000 g for 30 min. The supernatant was decanted, washed with aqueous EtOH (70% v/v), and then dried. 6. 6-TAMRA (0.1 mL, 10 mg/mL in dimethyl sulfoxide) was added to the 3'-amino-modified oligonucleotide suspended in 1.0 mL of sodium bicarbonate buffer (pH 8.5) and incubated at 37°C for 12 h. 7. The labeled oligonucleotide was resuspended in water and passed through a G25 Nap-10 disposable desalting column to remove free dye. 8. The oligonucleotide was purified by HPLC with a linear gradient of acetonitrile in 0.1 M triethylammonium acetate (TEAA) buffer, pH 7.2. 9. The entire sample was loaded on a Hamilton PRP-1 column and eluted with a linear gradient of acetonitrile for 40 min. Samples were monitored at 260 and 297 nm, and peaks corresponding to the dual-labeled oligonucleotide species were collected. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	DMSO: 2.86 mg/mL (6.64 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3232 mL	11.6158 mL	23.2315 mL
5 mM	0.4646 mL	2.3232 mL	4.6463 mL
10 mM	0.2323 mL	1.1616 mL	2.3232 mL
50 mM	0.0465 mL	0.2323 mL	0.4646 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.

Reference

Kelemen BR, et al. Hypersensitive substrate for ribonucleases. Nucleic Acids Res. 1999 Sep 15;27(18):3696-701.