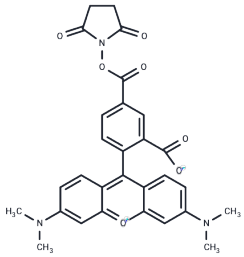
# Data Sheet (Cat.No.T14054)

TargetMol

## 5-TAMRA-SE

### Chemical Properties



CAS No. : 150810-68-7

Formula: C29H25N3O7

Molecular Weight: 527.53

Storage: Keep away from direct sunlight,Store at low temperature
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 | 5-TAMRA-SE, an amine-reactive fluorescent agent, forms conjugates that produce bright, pH-insensitive orange-red fluorescence (approximate excitation/emission maxima ~546/579) and exhibit good photostability. |
| Targets(IC50) | Others |
| Cell Research | Instructions<br>1. Dissolving reagent: 5-TAMRA-SE is usually provided in solid form and can be dissolved in anhydrous DMSO or DMF at a recommended concentration of 1-10 mM. It can be diluted to an appropriate concentration as needed.<br>2. Labeling reaction:<br>1) Mix the 5-TAMRA-SE solution with the target molecule containing an amine group (such as protein, antibody, etc.). Generally, the pH of the reaction should be kept in the range of 8.0-9.0 to ensure the optimal reactivity of the NHS ester.<br>2) The reaction time is generally 30 minutes to 1 hour, and the reaction is carried out at room temperature. The labeling reaction can remove unreacted fluorescent dye by centrifugation or remove excess dye by dialysis.<br>3. Removal of unreacted dye: After the reaction is completed, use methods such as dialysis or gel filtration to remove unreacted fluorescent dye. This step helps to avoid interference from background signals.<br>4. Storage: The labeled molecules can be stored at 4°C and avoid long-term exposure to strong light to avoid affecting fluorescence stability.<br><br>The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands. |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 1.32 mg/mL (2.5 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.8956 mL | 9.4781 mL | 18.9563 mL |
| 5 mM | 0.3791 mL | 1.8956 mL | 3.7913 mL |
| 10 mM | 0.1896 mL | 0.9478 mL | 1.8956 mL |
| 50 mM | 0.0379 mL | 0.1896 mL | 0.3791 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

Huang M,et al. Fluorescently Labeled α-Conotoxin TxID, a New Probe for α3β4 Neuronal Nicotinic Acetylcholine Receptors. Mar Drugs. 2022 Aug 12;20(8):511.

Ye QY,et al. [Mesenchymal stem cells derived apoptotic extracellular vesicles attenuate pro-inflammatory macrophages induced by Porphyromonas gingivalis lipopolysaccharide]. Zhonghua Kou Qiang Yi Xue Za Zhi. 2021 Aug 9;56(8):791-798. Chinese.

Dada OO, Huge BJ, Dovichi NJ. Simplified sheath flow cuvette design for ultrasensitive laser induced fluorescence detection in capillary electrophoresis. Analyst. 2012 Jul 7;137(13):3099-101.