



Certificate of Analysis

www.tocris.com

Product Name: 5-TAMRA SE Catalog No.: 5441 Batch No.: 1

CAS Number: 150810-68-7

IUPAC Name: 5-Carboxytetramethylrhodamine succinimidyl ester

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{29}H_{25}N_3O_7$ Batch Molecular Weight: 527.52

Physical Appearance: Dark red solid

Solubility: Acetonitrile to 5 mM

DMF to 100 mM DMSO to 50 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

Print Date: Aug 2nd 2019

www.tocris.com

Product Name: 5-TAMRA SE Catalog No.: 5441 Batch No.: 1

CAS Number: 150810-68-7

IUPAC Name: 5-Carboxytetramethylrhodamine succinimidyl ester

Description:

Fluorescent probe for DNA and RNA; amine-reactive. Also shown to stain telomeres. Nuclease resistant and nuclei permeable. Excitation\emission $\lambda \sim 545 \ 580$ nm.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₉H₂₅N₃O₇ Batch Molecular Weight: 527.52 Physical Appearance: Dark red solid

Minimum Purity: >95%

Batch Molecular Structure:

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

Acetonitrile to 5 mM DMF to 100 mM DMSO to 50 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Hirata *et al* (2014) Structural evaluation of tandem hairpin pyrrole-imidazole polyamides recognizing human telomeres. J.Am.Chem.Soc. **136** 11546. PMID: 25036716.

Kvach *et al* (2009) Practical synthesis of isomerically pure 5- and 6-carboxytetramethylrhodamines, useful dyes for DNA probes. Bioconjug. Chem. *20* 1673. PMID: 19606815.