

**Product Name:** TFX 546, SE

**Catalog No.:** 6623

**Batch No.:** 1

**IUPAC Name:** 6-[2-Carboxy-3,4,6-trichloro-5-[[2-[[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]-2-oxoethyl]thio]phenyl]-1,2,3,4,8,9,10,11-octahydro-2,2,4,8,10,10-hexamethyl-12,14-disulfopyrano[3,2-g:5,6-g']diquinolin-13-ium triethylammonium salt

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>44</sub>H<sub>47</sub>Cl<sub>3</sub>N<sub>4</sub>O<sub>14</sub>S.(CH<sub>3</sub>CH<sub>2</sub>)<sub>3</sub>NH

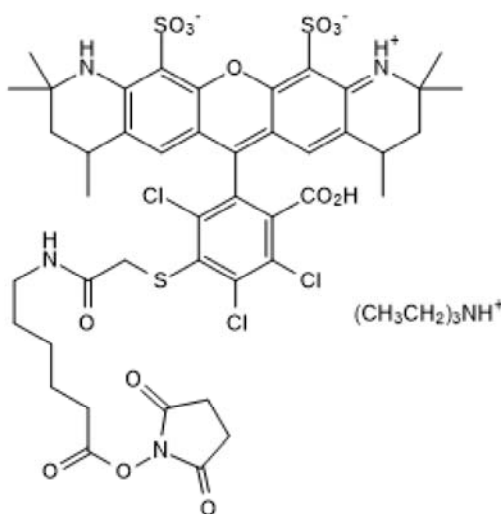
**Batch Molecular Weight:** 1159.6

**Physical Appearance:** Pink solid

**Solubility:** Soluble in DMSO

**Storage:** Store at -20°C

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 85.8% purity

**Mass Spectrum:** Consistent with structure

**UV Spectrum:** Consistent with structure

**λ<sub>max</sub>:** 554 nm (pH 7 buffer)

**λ<sub>em</sub>:** 572 nm (pH 7 buffer)

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

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**Description:**

Amine reactive yellow fluorescent dye. Insensitive to pH in the range 4 - 10. Forms bright and photostable conjugates with proteins and antibodies. Suitable for use in microscopy. Excitation maximum = 554 nm; emission maximum = 570 nm; extinction coefficient = 112,000 M<sup>-1</sup>cm<sup>-1</sup>; quantum yield = 0.79.

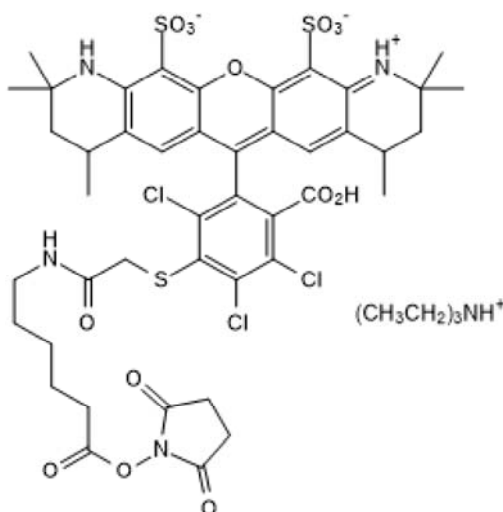
**Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>44</sub>H<sub>47</sub>Cl<sub>3</sub>N<sub>4</sub>O<sub>14</sub>S.(CH<sub>3</sub>CH<sub>2</sub>)<sub>3</sub>NH

Batch Molecular Weight: 1159.6

Physical Appearance: Pink solid

**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:**

Soluble in DMSO

This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

**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:**

**Hone et al** (2010) Alexa Fluor 546-ArIB[V11L;V16A] is a potent ligand for selectively labeling α 7 nicotinic acetylcholine receptors. *J.Neurochem.* **114** 994. PMID: 20492354.

**Iwata et al** (2005) Increased susceptibility of cytoplasmic over nuclear polyglutamine aggregates to autophagic degradation. *Proc.Natl.Acad.Sci.USA.* **102** 13135. PMID: 16141322.

**Panchuk-Voloshina et al** (1999) Alexa dyes, a series of new fluorescent dyes that yield exceptionally bright, photostable conjugates. *J.Histochem.Cytochem.* **47** 1179. PMID: 10449539.

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**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956