

Product Name: Janelia Fluor[®] 646, SE

Catalog No.: 6148

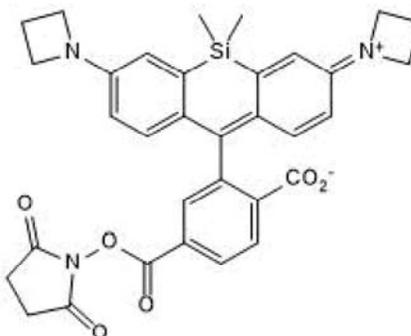
Batch No.: 6

CAS Number: 1811539-59-9

IUPAC Name: 1-[7-(1-Azetidinyl)-10-[2-carboxy-5-[[2,5-dioxo-1-pyrrolidinyl]oxy]carbonyl]phenyl]-9,9-dimethyl-9-silaanthracen-2-(9H)-ylidene]azetidinium, inner salt

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₃₃ H ₃₁ N ₃ O ₆ Si
Batch Molecular Weight:	593.71
Physical Appearance:	Yellow solid
Solubility:	DMSO to 5 mM DMF to 50 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.4% purity
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure

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

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Description:

Janelia Fluor[®] 646, SE is a fluorogenic fluorescent dye; supplied as an NHS ester for coupling to primary amine groups. NHS ester can be converted to relevant substrate for use in self-labeling tag systems, e.g. HaloTag[®] and SNAP-tag[®]. Suitable for confocal fluorescent imaging, super resolution microscopy (SRM) techniques such as dSTORM (live and fixed cells) and STED imaging. Can be multiplexed for two colour imaging with Janelia Fluor[®] 549 SE (Cat. No. 6147). Also suitable for flow cytometry. Cell permeable. Excitation maximum = 646 nm; emission maximum = 664 nm. Quantum yield = 0.54, Max. extinction coefficient = 152,000 ... Please see product specific page on www.tocris.com for full description.

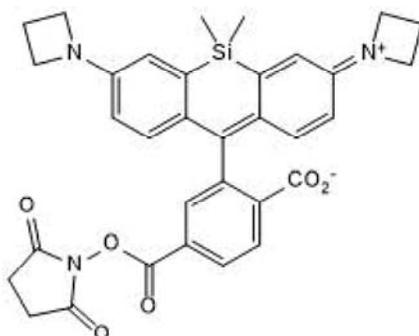
Physical and Chemical Properties:

Batch Molecular Formula: C₃₃H₃₁N₃O₆Si

Batch Molecular Weight: 593.71

Physical Appearance: Yellow solid

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

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:

DMSO to 5 mM

DMF to 50 mM

We recommend that stock solutions of this dye are prepared in anhydrous DMF. To measure the absorbance spectrum of this dye we recommend the following solvent: ethanol or trifluoroethanol plus 0.1% TFA. **CAUTION** - This product is chemically unstable in the presence of Trifluoroacetic acid (TFA).

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.

Licensing Information:

Sold under license from the Howard Hughes Medical Institute, Janelia Research Campus

References:

Legant et al (2016) High-density three-dimensional localization microscopy across large volumes. *Nat.Methods* **13** 359. PMID: 26950745.

Li et al (2016) Real-time imaging of Huntingtin aggregates diverting target search and gene transcription. *Elife* **5** e17056. PMID: 27484239.

Schmidt et al (2016) Live cell imaging reveals the dynamics of telomerase recruitment to telomeres. *Cell* **166** 1188. PMID: 27523609.

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