

**Product Name:** PA Janelia Fluor<sup>®</sup> 646, SE

**Catalog No.:** 6150

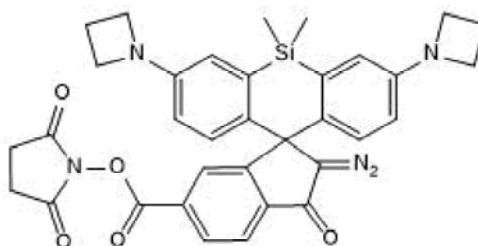
**Batch No.:** 1

**CAS Number:** 2093120-32-0

**IUPAC Name:** 2,5-Dioxo-1-pyrrolidinyl 3,7-di-1-azetidiny-2'-diazo-5,5-dimethyl-2',3'-dihydro-5H-3'-oxospiro[dibenzo[b,e]silole-10,1'-indene]-6'-carboxylate

**1. PHYSICAL AND CHEMICAL PROPERTIES**

**Batch Molecular Formula:** C<sub>34</sub>H<sub>31</sub>N<sub>5</sub>O<sub>5</sub>Si  
**Batch Molecular Weight:** 617.74  
**Physical Appearance:** Orange solid  
**Solubility:** DMSO to 20 mM  
**Storage:** Store at -20°C  
**Batch Molecular Structure:**



**2. ANALYTICAL DATA**

**HPLC:** Shows 94.2% purity  
**<sup>1</sup>H 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:**

Photoactivatable fluorescent dye; supplied as an NHS ester for coupling to primary amine groups. Non-fluorescent until activated at 365 nm. NHS ester can be converted to relevant substrate for use in self-labeling tag systems, e.g. HaloTag® and SNAP-tag®. Suitable for single molecule tracking and super resolution microscopy in live cells, specifically live cell sptPALM and fixed cell PALM. Can be multiplexed with PA Janelia Fluor® 549, SE (Cat. No. 6149) to perform two-colour sptPALM in live cells with activation at 405nm. Cell permeable. Excitation maximum = 649 - 651 nm; emission maximum = 663 - 665 nm. Upon protein conjugation ... Please see product datasheet on [www.tocris.com](http://www.tocris.com) for full description.

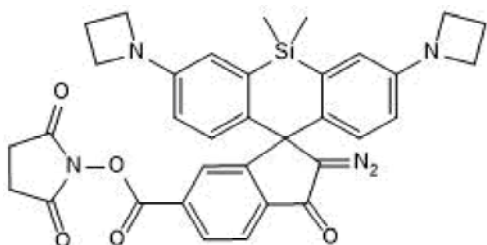
**Physical and Chemical Properties:**

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**References:**

Grimm *et al* (2016) Bright photoactivatable fluorophores for single-molecule imaging. *Nat.Methods* **13** 985. PMID: 27776112.

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

**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 20 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.

**Licensing Information:**

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

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