

Certificate of Analysis

Print Date: Dec 2nd 2024

www.tocris.com

Batch No.: 4

Catalog No.: 6150

Product Name: PA Janelia Fluor® 646, NHS ester

CAS Number: 2093120-32-0

IUPAC Name: 2,5-Dioxo-1-pyrrolidinyl 3,7-di-1-azetidinyl-2'-diazo-5,5-dimethyl-2',3'-dihydro-5H-3'-oxospiro[dibenzo[b,e]siline-10,1'-

indene]-6'-carboxylate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{34}H_{31}N_5O_5Si$

Batch Molecular Weight: 617.74

Physical Appearance: Dark orange solid
Solubility: DMSO to 20 mM
Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.0% purity at 226 nm

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Product Information

Print Date: Dec 2nd 2024

Batch No.: 4

www.tocris.com

Product Name: PA Janelia Fluor® 646, NHS ester

CAS Number: 2093120-32-0

IUPAC Name: 2,5-Dioxo-1-pyrrolidinyl 3,7-di-1-azetidinyl-2'-diazo-5,5-dimethyl-2',3'-dihydro-5H-3'-oxospiro[dibenzo[b,e]siline-10,1'-

indene]-6'-carboxylate

Description:

Key information: PA Janelia Fluor® 646, NHS ester is a photoactivatable fluorescent dye; supplied with an NHS ester reactive group for the labeling of primary amines. Suitable for live and fixed cell imaging. Application: Suitable for single molecule tracking and super resolution microscopy in live cells, specifically sptPALM (live cells) and PALM (fixed cells) techniques. Properties and Photophysical Data: Non-fluorescent until activated at 405 nm. NHS ester can be converted to relevant substrate for use in self-labeling tag systems, e.g. HaloTag® and SNAP-tag®. Can be multiplexed with PA Janelia Fluor® 549, NHS ester (Cat.... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₄H₃₁N₅O₅Si Batch Molecular Weight: 617.74

Physical Appearance: Dark orange solid

Minimum Purity: ≥90%

Batch Molecular Structure:

$$\bigvee_{N=0}^{\circ} \bigvee_{N=0}^{N} \bigvee_{$$

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

Catalog No.: 6150

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

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.

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