Hello Bio, Inc. 304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500 F. 609-228-4994

customercare-usa@hellobio.com



# **DATASHEET**

Janelia Fluor® 549, Azide

#### **Product overview**

Name Janelia Fluor® 549. Azide

Cat No HB7988

**Biological description** Cell-permeable, yellow fluorescent dye with an azide reactive group for copper-free click chemistry.

> Suitable for confocal microscopy and super resolution microscopy (SRM) including techniques such as dSTORM (both live and fixed cells) and STED. Also suitable for flow cytometry.

Janelia Fluor® 549 is 2 x brighter than TMR and Cy3 in vitro and live-cell experiments.

Spectrally similar dyes: Alexa Fluor® 546, Alexa Fluor® 555, BDY TMR-X, Atto 550, CF 555,

TAMRA, Cyanine 3

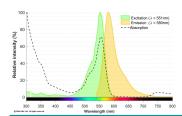
**Alternative names Biological action** Description

JF549, Azide Dyes & stains

Yellow dye supplied as an azide for click chemistry. Suitable for dSTORM, STED, confocal

microscopy, live cell imaging and flow cytometry.

### **Images**



#### **Biological Data**

**Application notes** 

#Protocol 1: Measurement of excitation and emission spectra of Janelia Fluor ® 549, azide

- Janelia Fluor® 549, azide was prepared at 1µm in PBS.
- Spectra were generated on a Tecan Infinite M200 PRO using the following parameters:
  - Excitation: Recording at 638nm while exciting between 280nm and 610nm
  - Emission: Exciting at 509nm while recording between 535nm and 800nm
  - Absorbance: Measured between 300 and 800nm

## **Solubility & Handling**

Storage instructions Solubility overview Storage of solutions -20°C

Soluble in DMSO

Prepare and use solutions on the same day if possible. Store solutions at -20°C for up to one month if storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Storage instructions **Shipping Conditions Important** 

-20°C

Stable for ambient temperature shipping. Follow storage instructions on receipt.

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use

#### **Chemical Data**

Chemical name 3,6-Di-1-azetidinyl-9-[5-[[2-[2-[2-azidoethoxy]ethoxy]ethoxy]ethoxy] ethoxy] ethoxy] ethoxy] ethoxy] ethoxy] ethoxy] ethoxy [-2-carboxyphenyl] x anthory (-2-carboxyphenyl) and (-2-c

ylium, inner salt

**Molecular Weight** 

**Chemical structure** 

654.71

**Molecular Formula**  $C_{35}H_{38}N_6O_7$ PubChem identifier 137919860

**SMILES** O = C(NCCOCCOCCOCN = [N+] = [N-])C1 = CC = C(C([O-]) = O)C(C(C2 = CC = C(N3CCC3)C = C2O4) = C2O4)

 $C=C/5)C4=CC5=[N+]6CCC\setminus 6)=C1$ 

Source

InChiKey XDSXVSGQYCACTI-UHFFFAOYSA-N

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

**Excitation** 549 nm 571 nm **Emission** 

#### References

A general method to improve fluorophores for live-cell and single-molecule microscopy.

Grimm JB et al (2015) Nature methods 12 PubMedID 25599551