

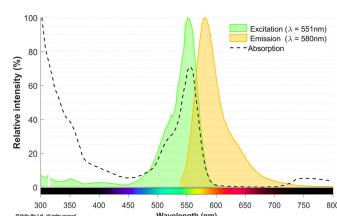
## DATASHEET

### Janelia Fluor® 549, Azide

#### Product overview

<b>Name</b>	Janelia Fluor® 549, Azide
<b>Cat No</b>	HB7988
<b>Biological description</b>	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 <i>in vitro</i> and live-cell experiments.
	<b>Spectrally similar dyes:</b> Alexa Fluor® 546, Alexa Fluor® 555, BDY TMR-X, Atto 550, CF 555, TAMRA, Cyanine 3
<b>Alternative names</b>	JF549, Azide
<b>Biological action</b>	Dyes & stains
<b>Description</b>	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 1 μm 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

-20 °C

##### Solubility overview

Soluble in DMSO

##### Important

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]ethyl]carbamoyl]-2-carboxyphenyl]xanthylium, inner salt
Molecular Weight	654.71
Chemical structure	
Molecular Formula	C <sub>35</sub> H <sub>38</sub> N <sub>6</sub> O <sub>7</sub>
PubChem identifier	137919860
SMILES	O=C(NCCOCCOCCOCCN=[N+]=[N-])C1=CC=C(C([O-])=O)C(C(C2=CC=C(N3CCC3)C=C2O4)=C(C=C/5)C4=CC5=[N+]6CCC16)=C1
Source	Synthetic
InChiKey	XDSXVSGQYCACTI-UHFFFAOYSA-N
Licensing details	Sold under license from the Howard Hughes Medical Institute, Janelia Research Campus
Excitation	549 nm
Emission	571 nm

## References

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

Grimm JB et al (2015) Nature methods 12

PubMedID [25599551](#)