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

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

customercare-usa@hellobio.com



DATASHEET

BAPTA-AM Janelia Fluor® 549

Product overview

Name BAPTA-AM Janelia Fluor® 549

Cat No HB24669

Biological description Membrane permeable, red-shifted (Excitation 546nm, Emission 569nm), intracellular calcium (Ca²⁺)

indicator ($K_d = 310$ nM). Suitable for measurement of fast calcium dynamics in neurons and

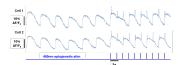
cardiomyocytes with excellent photostability and brightness compared to genetically encoded sensors. Reduces issues with tissue autofluorescence and background fluorescence due to the red-shifted fluorophore. Compatible with fluorescence microscopy using TRITC or Cy3 filters. Ideally suited for multicolor imaging and use with optogenetic tools for triggering calcium transients that can then be measured with BAPTA-AM Janelia Fluor® 549 at a different wavelength. For optimal cell loading, F-127 is available either as a 10% solution in water (HB16503) and 20% solution in DMSO (HB9631).

Applications fluorescence imaging

Purity >90%

Description Red-shifted cell permeable calcium indicator

Images



Biological Data

Application notes Please follow our BAPTA-AM Janelia Fluor® 549 protocol

Solubility & Handling

Storage instructions -20°C

Solubility overview Soluble in DMSO to at least 2mg/ml

Storage of solutions 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.

Handling This compound is light sensitive; exposure to light may affect compound performance. We therefore

recommend storing the solid material and any solutions in the dark and protecting from light.

Shipping Conditions

Important

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

Molecular Weight Chemical structure 1215

Molecular Formula

 $C_{69}H_{67}N_5O_{25}$

Appearance

Red to dark pink film or pellet

Licensing details

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

References

Isomeric Tuning Yields Bright and Targetable Red Ca2+ Indicators

Deo C, Sheu SH, Seo J, Clapham DE, Lavis LD (2019) J Am Chem Soc

PubMedID 31430138