

## BODIPY TR Cadaverine

## Chemical Properties

CAS No. :	217190-24-4
Formula:	C <sub>26</sub> H <sub>28</sub> BClF <sub>2</sub> N <sub>4</sub> O <sub>2</sub> S
Molecular Weight:	544.85
Storage:	Keep away from moisture,Keep away from direct sunlight, Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>

## Biological Description

Description	BODIPY TR Cadaverine, a derivative of cadaverine, is a red fluorescent dye used in a highly sensitive and robust fluorescent displacement assay. BODIPY TR Cadaverine binds strongly to native LPS, specifically recognizing lipid A, and is competitively displaced by compounds that have an affinity for lipid A. BODIPY TR Cadaverine is therefore used in bacterial membrane biology and endotoxin-binding assay systems to study lipid A interactions, LPS binding competition, and small-molecule displacement dynamics in fluorescence-based biochemical screening platforms.
Targets(IC50)	Others
In vitro	BODIPY TR Cadaverine assay [1] involves quantifying autophagy in cells by incubating them with 125 nM of the compound for 10 minutes. After incubation, the cells are washed four times with PBS and lysed using a buffer containing 10 mM Tris-Cl pH 8 and 0.1% Triton X-100. Fluorescence measurements are then taken with a SPECTRAmax fluorimeter (Molecular Devices) at excitation and emission wavelengths of 588 nm and 616 nm, respectively. To normalize fluorescence levels relative to cell number, 0.2 mM ethidium bromide is added, and DNA fluorescence is read at an excitation wavelength of 530 nm and emission wavelength of 590 nm [1].

## Solubility Information

Solubility	DMSO: 100 mg/mL (183.54 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	1mg	5mg	10mg
1 mM	1.8354 mL	9.1768 mL	18.3537 mL
5 mM	0.3671 mL	1.8354 mL	3.6707 mL
10 mM	0.1835 mL	0.9177 mL	1.8354 mL
50 mM	0.0367 mL	0.1835 mL	0.3671 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

Carreira RS, et al. Cyclophilin D is required for mitochondrial removal by autophagy in cardiac cells. *Autophagy*. 2010 May;6(4):462-72.

Wood SJ, et al. Anti-endotoxin agents. 1. Development of a fluorescent probe displacement method optimized for the rapid identification of lipopolysaccharide binding agents. *Comb Chem High Throughput Screen*. 2004 May;7(3):239-49.

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