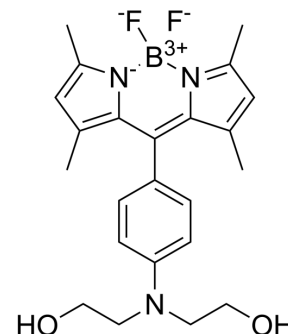


10-(4-(Bis(2-hydroxyethyl)amino)phenyl)-5,5-difluoro-1,3,7,9-tetramethyl-5H-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborinin-4-ium-5-uide

Cat. No.:	HY-D1551
CAS No.:	886212-86-8
Molecular Formula:	C ₂₃ H ₂₈ BF ₂ N ₃ O ₂
Molecular Weight:	427.3
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	10-(4-(Bis(2-hydroxyethyl)amino)phenyl)-5,5-difluoro-1,3,7,9-tetramethyl-5H-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborinin-4-ium-5-uide, a BODIPY derivative, is a fluorescent indicator for detecting Pb ²⁺ (Ex=504 nm, Em=510 nm) ^{[1][2]} .
IC₅₀ & Target	Pb ²⁺ ^[1]
In Vitro	<p>Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs)^[2].</p> <ol style="list-style-type: none"> 1. Prepare the stock solutions (1 mM) of the perchlorate salts of various metal ions separately. 2. stock solution of host (0.1 mM) in acetonitrile. 3. Prepare the test solutions by placing 4-40 μL of the probe stock solution into a test tube. 4. Add an appropriate aliquot of each metal stock, and dilute the solution to 4 mL with acetonitrile. 5. Excited at 504 nm. <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Hye Young Lee, et al. A selective fluoroionophore based on BODIPY-functionalized magnetic silica nanoparticles: removal of Pb²⁺ from human blood. *Angew Chem Int Ed Engl.* 2009;48(7):1239-43.

[2]. Xin Qi, et al. New BODIPY Derivatives as OFF-ON Fluorescent Chemosensor and Fluorescent Chemodosimeter for Cu²⁺: Cooperative Selectivity Enhancement toward Cu²⁺. *J Org Chem.* 2006 Mar 31;71(7):2881-4.

Caution: Product has not been fully validated for medical applications. For research use only.

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