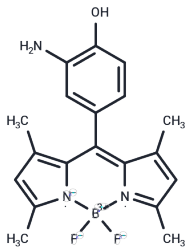
Data Sheet (Cat.No.T87070)

TargetMol

o-Pah

Chemical Properties



CAS No. : 1181844-41-6

Formula: C19H20BF2N3O

Molecular Weight: 355.19

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	o-Pah, a BODIPY derivative with -NH2 and -OH substitutions on the meso-Ph group, demonstrates metal-induced J-aggregation when exposed to Cu2+ and shows specific fluorescence enhancement for Hg2+ (Ex/Em = 483/(495-600) nM) [1].
Targets(IC50)	Others
In vitro	o-Pah (20 μM) changes color upon the addition of 100 μM various metal ions, with a further addition of 20 μM Cu 2+ in a DMSO/HEPES buffer solution [1]. Procedures for metal ion sensing: stock solutions of metal ions (100 mM and 10 mM) were prepared in deionized water [1]. A stock solution of o-Pah (0.5 mM) is prepared in DMSO and then diluted to 5 μM with HEPES buffer solution (50 mM KNO3, 50 mM HEPES, pH 7.2). During titration experiments, 2 mL solutions of o-Pah (5 μM, 0.5 μM) are placed in a 1 cm quartz optical cell, and Cu 2+, Hg 2+ stock solutions are added gradually with a micropipette. In selectivity experiments, test samples are prepared by adding appropriate amounts of the metal ion stock solution into the 2 mL solution of o-Pah (5 μM). During fluorescence measurements, the excitation wavelength is 483 nm, and emission spectra are collected between 495-600 nm. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8154 mL	14.077 mL	28.1539 mL
5 mM	0.5631 mL	2.8154 mL	5.6308 mL
10 mM	0.2815 mL	1.4077 mL	2.8154 mL
50 mM	0.0563 mL	0.2815 mL	0.5631 mL

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.