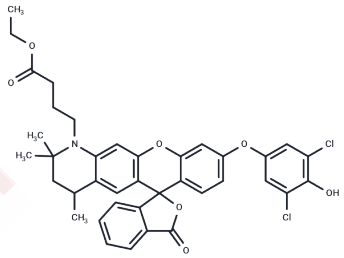
Data Sheet (Cat.No.T39432)

TargetMol

HKOCl-4

Chemical Properties



CAS No. : 2031170-85-9

Formula: C38H35Cl2NO7

Molecular Weight: 688.6

Storage: Keep away from direct sunlight
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	HKOCl-4 (BXY2142) is a rhodol-based yellow fluorescent probe known for its exceptional sensitivity and selectivity in detecting hypochlorous acid. With an absorption wavelength longer than fluorescein-based probes, it offers improved pH stability. Notably, HKOCl-4 exhibits excitation at 530 nm and emission at 557 nm.
Targets(IC50)	Others
In vitro	HKOCl-4 (10 μM) demonstrates a proportional increase in fluorescence intensity with rising concentrations of hypochlorous acid[1]. It exhibits an ultra-fast response to 1 equivalent of HOCl, achieving maximum fluorescence within 2 minutes, and displays a more than 20-fold increase in fluorescence intensity compared to its reaction with other analytes, including 1 equivalent of ?OH and ONOO? as well as 10 equivalents of O2, NO, 1O2, ROO?, TBHP, and H2O2[2]. Initial toxicity tests on HKOCl-4 have confirmed its non-toxicity in living cells, specifically in RAW264.7 macrophages, even at concentrations as high as 50 μM[2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4522 mL	7.2611 mL	14.5222 mL
5 mM	0.2904 mL	1.4522 mL	2.9044 mL
10 mM	0.1452 mL	0.7261 mL	1.4522 mL
50 mM	0.029 mL	0.1452 mL	0.2904 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.

Reference

Dan Yang, et al. Diarylether-based fluorogenic probes for detection of hypochlorous acid or hydroxyl radical. Patent US20160312033.

Xiaoyu Bai, et al. HKOCl-4: a rhodol-based yellow fluorescent probe for the detection of hypochlorous acid in living cells and tissues.

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