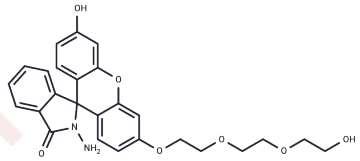
Data Sheet (Cat.No.T15279)

TargetMol

FHZ

Chemical Properties



CAS No. : 1883737-63-0

Formula: C26H26N2O7

Molecular Weight: 478.49

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	FHZ is a fluorescent probe (IUPAC: 2-(7-hydroxy-3H-phenoxazin-3-one-10-yl)benzoic acid), widely utilized in biological imaging due to its high sensitivity and selectivity in detecting specific molecular targets within cellular environments, exhibiting optimal excitation and emission spectra for various fluorescence microscopy applications.
Targets(IC50)	Others
In vitro	Upon being incorporated with the probe FHZ and sequentially treated with HClO and the H2O2/EDTA-Fe2+ system, HeLa cells exhibit intense fluorescence in both cyan and green channels. FHZ is capable of emitting two distinct fluorescent signals upon exposure to ?OH and HClO, enabling the simultaneous differentiation of these species through a dual-channel detection approach leveraging two excitation wavelengths. The probe demonstrates remarkable specificity for ?OH and HClO detection, utilizing excitations at 410 nm and 490 nm, respectively. Moreover, FHZ efficiently penetrates cellular mitochondria, allowing for distinct and visual differentiation of endogenous ?OH and HClO via dual fluorescent signals[1].
In vivo	Probe FHZ quickly enters the bloodstream through the zebrafish intestine, distributing uniformly across all zebrafish tissues. It maintains its stability in the blood, organs, and tissues in the absence of ROS, ensuring its integrity in biological environments. Notably, it selectively interacts with ·OH and HClO species[1], demonstrating its specificity and reactive capabilities under precise conditions.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0899 mL	10.4495 mL	20.8991 mL
5 mM	0.418 mL	2.0899 mL	4.1798 mL
10 mM	0.209 mL	1.045 mL	2.0899 mL
50 mM	0.0418 mL	0.209 mL	0.418 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

Zhang R, et al. Real-Time Discrimination and Versatile Profiling of Spontaneous Reactive Oxygen Species in Living Organisms with a Single Fluorescent Probe. J Am Chem Soc. 2016 Mar 23;138(11):3769-78.