

Mito-PN

Chemical Properties

CAS No. : 2674101-37-0

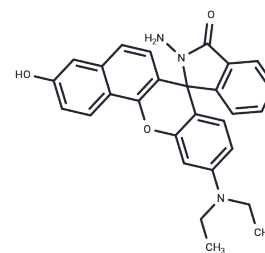
Formula: C₂₈H₂₅N₃O₃

Molecular Weight: 451.52

Keep away from direct sunlight

Storage: Store at -20°C

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Mito-PN is a versatile dye. Dyes are crucial tools in biological experiments, aiding researchers in observing and analyzing cell structures, tracking biomolecules, assessing cellular functions, distinguishing cell types, detecting biomolecules, studying tissue pathology, and monitoring microorganisms. Their applications span a wide range from basic scientific research to clinical diagnostics. Dyes are also widely used in traditional fields like textile dyeing and emerging areas such as functional textile processing, food coloring, and dye-sensitized solar cells.
Targets(IC50)	Others
In vitro	Probe Mito-PN (5 μM) in a phosphate-buffered solution (PBS, 20 mM, pH = 7.4) shows minimal fluorescence emission in its free state due to the spiro-lactone structure. Upon addition of ONOO ⁻ , a substantial fluorescence enhancement, approximately 40-fold at 630 nm, is observed. Remarkably, Mito-PN detects ONOO ⁻ rapidly, within less than 5 seconds, which is more efficient than the rhodamine and phenylhydrazine conjugation that requires about an hour. This quick detection facilitates probing the highly reactive and transient ONOO ⁻ in biological systems. Additionally, absorption spectral analysis reveals a significant increase at around 570 nm upon introduction of ONOO ⁻ .

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2147 mL	11.0737 mL	22.1474 mL
5 mM	0.4429 mL	2.2147 mL	4.4295 mL
10 mM	0.2215 mL	1.1074 mL	2.2147 mL
50 mM	0.0443 mL	0.2215 mL	0.4429 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481