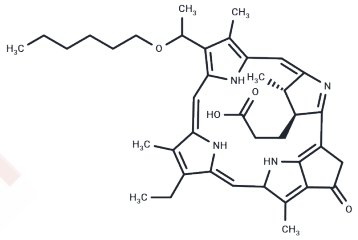
Data Sheet (Cat.No.T15501)

TargetMol

HPPH

Chemical Properties



CAS No. : 149402-51-7

Formula: C39H48N4O4

Molecular Weight: 636.82

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	HPPH (Photochlor) (Photochlor) is a second-generation photosensitizer. It is used as photodynamic therapy (PDT) agent.
Targets(IC50)	Others,Reactive Oxygen Species,ROS,Photosensitizer
In vitro	Cells treated with GO-PEG-HHPH displays a stronger fluorescence signal than those treated with free HPPH. In fact, the fluorescence of HPPH is rather weak. After 24 h, Fluorescence image of 4T1 cells incubated with 0.49 μg/mL GO-PEG, 1 μM HPPH (free HPPH), or equivalent amount of GO-PEG-HPPH (1 μM HPPH and 0.49 μg/mL GO-PEG). The cellular uptake of GO-PEG-HPPH and HPPH is investigated with 4T1 murine mammary cancer cells. The cells are incubated with GO-PEG-HPPH and free HPPH at equivalent HPPH concentration (1 μM) for 24 h and then observed with a confocal microscope [1].
In vivo	A combination treatment regimen for Colo26-HA tumor-bearing BALB/c mice involves administering an HPPH-PDT (0.4 μmoles/kg HPPH followed by 665 nm light at 48 J/cm2) to enhance anti-tumor immunity. Following a 9-day rest period and an HPPH injection, tumors receive a control treatment with 665 nm light at 132 J/cm2 on day 10 [2].

Solubility Information

Solubility	DMSO: 50 mg/mL (78.52 mM),Sonication is recommended. H2O: < 0.1 mg/mL (insoluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (3.14 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5703 mL	7.8515 mL	15.703 mL
5 mM	0.3141 mL	1.5703 mL	3.1406 mL
10 mM	0.157 mL	0.7852 mL	1.5703 mL
50 mM	0.0314 mL	0.157 mL	0.3141 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

Rong P, et al. Photosensitizer loaded nano-graphene for multimodality imaging guided tumor photodynamic therapy. Theranostics. 2014 Jan 15;4(3):229-39.
Shams M, et al. Development of photodynamic therapy regimens that control primary tumor growth and inhibit secondary disease. Cancer Immunol Immunother. 2015 Mar;64(3):287-97.