Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

HPPH

Catalog No: tcsc0007752

Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
149402-51-7

Formula:
$C_{39}H_{48}N_4O_4$

Pathway:
Others

Target:
Others

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
636.82

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Product Description

HPPH is a second generation photosensitizer, which acts as a photodynamic therapy (PDT) agent.

In Vitro: 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) after 24 h. 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. Cells treated with GO-PEG-HHPH shows stronger fluorescence signal than those treated with free HPPH. In fact, the fluorescence of HPPH is rather weak[1].

In Vivo: Tumors are treated with an immune-enhancing PDT regimen followed by a tumor-controlling PDT regimen can leads to enhancement of anti-tumor immunity, while retaining effective control of primary tumor growth. To test this hypothesis, a combination treatment regimen is devised in which Colo26-HA tumor-bearing BALB/c mice are treated with a HPPH-PDT regimen known to lead to enhanced anti-tumor immunity (0.4 μmoles/kg HPPH followed 18 h later by illumination with 665 nm light for a total dose of 48 J/cm^2). Following illumination, mice are rested for 9 days; on the ninth day, mice are injected with HPPH. On day 10 following the first treatment, tumors are treated with a tumor control treatment regimen (illumination with 665 nm light for a total dose of 132 J/cm^2 given)[2].