

# HPPH

# Catalog No: tcsc0007752

 
 Available Sizes

 size: 5mg

 size: 25mg

 size: 50mg

 size: 100mg

 Disperifications

 CAS No: 149402-51-7

 Formula: c<sub>39</sub>H<sub>48</sub>N<sub>4</sub>O<sub>4</sub>

#### **Pathway:** Others

### **Target:** Others

# Purity / Grade:

>98%

## Solubility:

10 mM in DMSO

#### **Observed Molecular Weight:**

636.82

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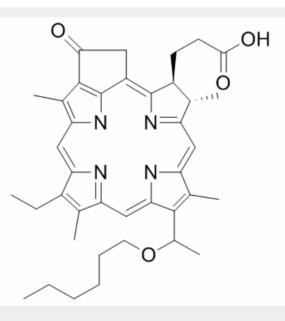


# **Product Description**

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  $\mu$ g/mL GO-PEG, 1  $\mu$ M HPPH (free HPPH) or equivalent amount of GO-PEG-HPPH (1  $\mu$ M HPPH and 0.49  $\mu$ g/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  $\mu$ M) 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<sup>[1]</sup>.

*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<sup>2</sup>). 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<sup>2</sup> given)<sup>[2]</sup>.



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