Screening Libraries

Hematoporphyrin monomethyl ether

Cat. No.: HY-134990 CAS No.: 148471-91-4 Molecular Formula: $C_{70}H_{80}N_8O_{12}$ Molecular Weight: 1225.43 Target: **Apoptosis** Pathway: **Apoptosis**

Storage: 4°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 62.5 mg/mL (51.00 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.8160 mL	4.0802 mL	8.1604 mL
	5 mM	0.1632 mL	0.8160 mL	1.6321 mL
	10 mM	0.0816 mL	0.4080 mL	0.8160 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (1.70 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	Hematoporphyrin monomethyl ether, second generation of porphyrin-related photosensitizer, is characterized by its single form, high yield of singlet oxygen, high selectivity, and low toxicity, which has been widely used in the diagnosis and research of various tumors, including lung cancer, bladder cancer, and nevus flammeus and brain glioma ^[1] .
In Vitro	Hematoporphyrin monomethyl ether (HMME) is a novel and promising porphyrin-related photosensitizer for photodynamic therapy (PDT). HMME-PDT can induce cell deaththrough both necrosis and apoptosis in HeLa cells. ROS, such as singlet oxygen and hydroxyl radical, generated in HeLa cells play a decisive role in HMME-PDT-induced cell death ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ding X, et al. Hematoporphyrin monomethyl ether photodynamic damage on HeLa cells by means of reactive oxygen species production and cytosolic free calcium

ncentration elevation. Cancer Lett. 2004;216(1):43-54		

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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