

# **Data Sheet**

Product Name: MHI-148

Cat. No.: CS-0615987

CAS No.: 172971-76-5

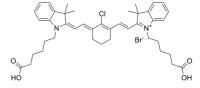
Molecular Formula:  $C_{42}H_{52}BrClN_2O_4$ 

Molecular Weight: 764.23

Target: Fluorescent Dye

Pathway: Others

**Solubility:** 10 mM in DMSO



### **BIOLOGICAL ACTIVITY:**

MHI-148 is a near-infrared heptamethine cyanine dye with tumor-targeting properties for cancer detection, diagnosis and research. MHI-148 is immediately taken up and accumulated by lysosomes and mitochondria of tumor cells, but not in lysosomes and mitochondria of normal cells<sup>[1]</sup>. *In Vitro*: MHI-148 (10  $\mu$ M, 1 h)?is significantly more absorbed in HT-29 colon carcinoma cells than in normal NIH3T3 fibroblasts and has tumor imaging and targeting properties<sup>[1]</sup>.

MHI-148 (0-1.5 μM, 3 days) causes only negligible toxicity in HT-29 and NIH3T3 cells<sup>[1]</sup>.

## References:

[1]. Athira Raveendran, et al. Heptamethine Cyanine Dye MHI-148-Mediated Drug Delivery System to Enhance the Anticancer Efficiency of Paclitaxel. Int J Nanomedicine. 2021 Oct 21;16:7169-7180.

# **CAIndexNames:**

3H-Indolium, 1-(5-carboxypentyl)-2-[2-[3-[2-[1-(5-carboxypentyl)-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]ethylidene]-2-chloro-1-cyclohexen-1-yl]ethenyl] -3,3-dimethyl-, bromide (1:1)

### **SMILES:**

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 610-426-3128 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr., Suite Q., Monmouth Junction, NJ 08852, USA

Page 1 of 1 www.ChemScene.com