

Product Data Sheet

Cas No.:	874748-20-6	Cat. No:	PL09268
Product Name:	Coppersensor 1		
Product synonym:	-		
Chemical name:	Coppersensor 1		
MF:	C30H50BN3F2S4	FW:	629.806
Purity:	≥98%	Batch No.:	-
Storage:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	[F-][B+3]1(N2=C(C(CC)=C(C)C2=C(CN(CCSCCSCC)CCSCCSCC)C2=C(C)C(CC)=C(C)[N-]12)C)[F-]		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

Coppersensor-1 (CS1) 是一种膜透性荧光染料。Coppersensor-1 对 Cu^{2+} 具有亲和力，其亲和力在皮摩尔范围，对竞争细胞金属离子具有很高的选择性。Coppersensor-1 作为探针，可以选择性、灵敏地检测包括活细胞在内的生物样品中的铜 (II) 离子 (Cu^{2+})。Coppersensor-1 可用于癌症、心血管疾病、神经系统疾病等严重疾病的成像研究。

生物活性	Coppersensor-1 (CS1) is a membrane-permeable fluorescent dye. Coppersensor-1 has a picomolar affinity for Cu with high selectivity over competing cellular metalions. Coppersensor-1 as a probe, can selective and sensitive detection of copper(II) ions (Cu) in biological samples, including live cells. Coppersensor-1 can be used for the research of imaging of severe diseases such as cancer, cardiovascular disorders and neurogenerative diseases.
体外研究(In Vitro)	<p>Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).</p> <p>A. Preparation of reagent stock solutions for imaging:</p> <ol style="list-style-type: none"> 1. Prepare a 1 mM stock solution of CS1 (MW 630 g/mol) in DMSO by dissolving 0.63 mg of solid CS1 per milliliter of DMSO solvent. 2. Prepare a 10 mM stock solution of CuCl_2 (MW 134 g/mol) by dissolving 1.34 mg of solid CuCl_2 per milliliter of Millipore water solvent. <p>B. CS1 labeling of live cells:</p> <ol style="list-style-type: none"> 1. Imaging experiments with cells will require 1-2 d with cells in culture. Incubate the cells according to your normal protocol. 2. One day before imaging, cells are passaged and plated on 18-mm glass coverslips coated with poly-L-lysine (50 $\mu\text{g}/\text{mL}$). <p>Adherent cells for imaging are grown to 50-80% confluency.</p>
包装储存	Pure form -20°C 3 years; 4°C 2 years