Data Sheet (Cat.No.T8813)

TargetMol

Tetrakis (4-carboxyphenyl) porphyrin

Chemical Properties

CAS No. : 14609-54-2

Formula: C48H30N4O8

Molecular Weight: 790.774

Storage: Keep away from direct sunlight,Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Tetrakis (4-carboxyphenyl) porphyrin (TCPP) serves as a metal remover and is a fabricated three-dimensional Ru polymer complex that can be grafted on SiO2/Nb2O5 substrate and subsequently metallized to study catalytic oxidation of hydrazine.
Targets(IC50)	Others
In vitro	tetrakis (4-carboxyphenyl) porphyrin(TCPP) displayed relatively low solubility (<0.1 mg mL-1) in a 1 M LiDFOB/PC electrolyte, high reversible specific capacity (ca. 1200 mA h g-1 at 358 mA g-1), excellent rate capability (548.4 mA h g-1 at 8 A g-1) and superior cycling performance (capacity retention of 89% after 2500 cycles at 6 A g-1).

Solubility Information

Solubility	H2O: Soluble, DMSO: 8.00 mg/mL (10.12 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2646 mL	6.323 mL	12.6459 mL
5 mM	0.2529 mL	1.2646 mL	2.5292 mL
10 mM	0.1265 mL	0.6323 mL	1.2646 mL
50 mM	0.0253 mL	0.1265 mL	0.2529 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Eun-Young Jeong, et al. Removal of Cu(II) from water by tetrakis(4-carboxyphenyl) porphyrin-functionalized mesoporous silica. J Hazard Mater. 2011 Jan 30;185(2-3):1311-7.

Han Wu, Jianjun Zhang, Xiaofan Du.et al.A large π-conjugated tetrakis (4-carboxyphenyl) porphyrin anode enables high specific capacity and superior cycling stability in lithium-ion batteries.Chem Commun (Camb). 2019 Sep 19;55(76):11370-11373.