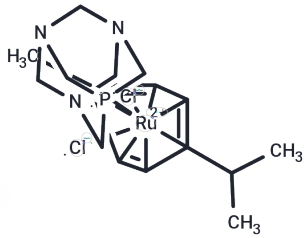
Data Sheet (Cat.No.T34262)

RAPTA-C

Chemical Properties



CAS No. : 372948-28-2

Formula: C16H26Cl2N3PRu

Molecular Weight: 463.35

Storage: 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	RAPTA-C induces EAC cell cycle arrest and apoptosis via the mitochondrial and p53-JNK pathways, and can be used in the study of breast and ovarian cancer.
Targets(IC50)	Apoptosis,Caspase

Solubility Information

Solubility	DMSO: 25 mg/mL (53.95 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1582 mL	10.791 mL	21.582 mL
5 mM	0.4316 mL	2.1582 mL	4.3164 mL
10 mM	0.2158 mL	1.0791 mL	2.1582 mL
50 mM	0.0432 mL	0.2158 mL	0.4316 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

Lu M, et al. Dual drug delivery system of RAPTA-C and paclitaxel based on fructose coated nanoparticles for metastatic cancer treatment. Biochem Biophys Res Commun. 2023 Jan 15;640:134-141.
Zeng L, et al. The development of anticancer ruthenium(ii) complexes: from single molecule compounds to nanomaterials. Chem Soc Rev. 2017 Oct 2;46(19):5771-5804.
Davey GE, Adhireksan Z, Ma Z, Riedel T, Sharma D, Padavattan S, Rhodes D, Ludwig A, Sandin S, Murray BS, Dyson PJ, Davey CA. Nucleosome acidic patch-targeting binuclear ruthenium compounds induce aberrant chromatin condensation. Nat Commun. 2017 Nov 17;8(1):1575. doi: 10.1038/s41467-017-01680-4. PubMed PMID: 29146919; PubMed Central PMCID: PMC5691193.
Batchelor LK, Păunescu E, Soudani M, Scopelliti R, Dyson PJ. Influence of the Linker Length on the Cytotoxicity of Homobinuclear Ruthenium(II) and Gold(I) Complexes. Inorg Chem. 2017 Aug 21;56(16):9617-9633. doi: 10.1021/acs.inorgchem.7b01082. Epub 2017 Jul 31. PubMed PMID: 28758743.