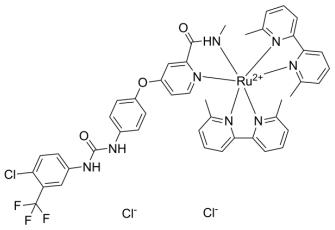
EGFR-IN-108 chloride

Cat. No.:	HY-163402
Molecular Formula:	$C_{45}H_{40}Cl_3F_3N_8O_3Ru$
Molecular Weight:	1005.28
Target:	EGFR; Apoptosis
Pathway:	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

EGFR-IN-108 chloride (Compound Ru3S) is an EGFR inhibitor with an IC_{50} value of 5.8 nM for hEGFR. EGFR-IN-108 chloride induces apoptosis and has anti-proliferative activity against cancer cells. EGFR-IN-108 chloride also has anti-angiogenic effects[1].

In Vitro

Ru4S (0.2-100 μM; 48 h) shows cytotoxicity on HepG2, Caco-2, HT-29, MCF-7, A549, HEK293T cells, with IC_{50} values of 23.76, 2.47, 6.24, 5.35, 29.90, 33.15 μM respectively[1].

Ru4S (0.78-50 μM; 48 h) induces apoptosis in HepG2 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Cytotoxicity Assay[1]

Cell Line:	HepG2, Caco-2, HT-29, MCF-7, A549, HEK293T cells
Concentration:	0.2-100 μM
Incubation Time:	48 h
Result:	exhibited cytotoxicity.

Cell Proliferation Assay[1]

Cell Line:	HepG2 cells
Concentration:	0.78, 3.12, 12.5, and 50 μM
Incubation Time:	48 h
Result:	increased Sub G1 ($p < 0.0001$) and decreased G0/G1, S, and G2/M percentages ($p < 0.05$) at 0.78 μM. And slightly increased Sub G1 ($p < 0.01$), slightly decreased G0/G1 ($p < 0.01$), and decreased G2/M ($p < 0.05$) at 3.12 and 12.5 μM. Increased Sub G1($p < 0.0001$) and decreased S ($p < 0.01$), and did not affect the G0/G1 and G2/M phases at 50 μM.

REFERENCES

[1]. Zengin Kurt B, et al. Synthesis of Sorafenib-Ruthenium Complexes, Investigation of Biological Activities and Applications in Drug Delivery Systems as an Anticancer Agent. J Med Chem. 2024 Mar 12.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA