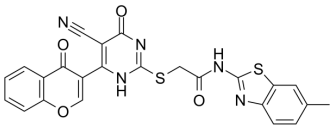
EGFR/HER2/TS-IN-1

Cat. No.:	HY-146238
CAS No.:	2444363-11-3
Molecular Formula:	$C_{24}H_{15}N_5O_4S_2$
Molecular Weight:	501.54
Target:	EGFR; Thymidylate Synthase; 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/HER2/TS-IN-1 (Compound 4d) is an EGFR, HER2 and TS (Thymidylate synthase) inhibitor with IC_{50} values of 0.203, 0.088 and 0.168 μM against EGFR, HER2 and TS, respectively. EGFR/HER2/TS-IN-1 induces MCF7 cell apoptosis[1].

IC_{50} & Target

HER2	Thymidylate synthase	EGFR
0.088 μM (IC_{50})	0.168 μM (IC_{50})	0.203 μM (IC_{50})

In Vitro

EGFR/HER2/TS-IN-1 (Compound 4d) shows cytotoxicity with an IC_{50} of 0.693 μM against MCF7 cells[1].

EGFR/HER2/TS-IN-1 (10 μg, 24 h) arrests cell cycle at G2/M phase and induces cell apoptosis in MCF7 cells[1].

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

Cell Cycle Analysis[1]

Cell Line:	MCF7
Concentration:	10 μg
Incubation Time:	24 h
Result:	Arrested cell cycle at G2/M phase.

Apoptosis Analysis[1]

Cell Line:	MCF7
Concentration:	10 μg
Incubation Time:	24 h
Result:	Induced cell apoptosis.

REFERENCES

[1]. Abdellatif KRA, et al. Design, synthesis, molecular docking and antiproliferative activity of some novel benzothiazole derivatives targeting EGFR/HER2 and TS. Bioorg Chem. 2020 Aug;101:103976.

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

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