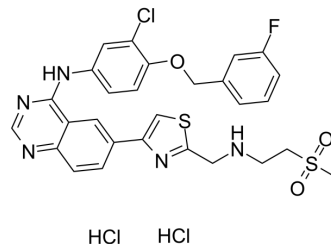


GW583340 dihydrochloride

Cat. No.:	HY-103439
CAS No.:	1173023-85-2
Molecular Formula:	C ₂₈ H ₂₇ Cl ₃ FN ₅ O ₃ S ₂
Molecular Weight:	671.03
Target:	EGFR
Pathway:	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	GW 583340 dihydrochloride is a potent dual EGFR/ErbB2 tyrosine kinase inhibitor (IC ₅₀ : 0.01 and 0.014 μM respectively). GW 583340 dihydrochloride reverses ABCG2- and ABCB1-mediated drug resistance. GW 583340 dihydrochloride has anti-cancer activity ^{[1][2][3]} .
In Vitro	<p>GW 583340 dihydrochloride (5 μM) decreases the IC₅₀ values of Mitoxantrone in inhibition of ABCG2-482-R2 and ABCG2-482-T7 cell lines^[1].</p> <p>GW 583340 dihydrochloride (2.5 and 7.5 μM, 24 h) increases in ROS accumulation in both SUM149 and SUM190 cells, and induces cell apoptosis^[2].</p> <p>GW 583340 dihydrochloride (0-10 μM) reduces the colony formation in SCCF1 cells and CatMC cells^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

- [1]. Sodani K, et al. GW583340 and GW2974, human EGFR and HER-2 inhibitors, reverse ABCG2- and ABCB1-mediated drug resistance. *Biochem Pharmacol.* 2012 Jun 15;83(12):1613-22.
- [2]. Aird KM, et al. ErbB1/2 tyrosine kinase inhibitor mediates oxidative stress-induced apoptosis in inflammatory breast cancer cells. *Breast Cancer Res Treat.* 2012 Feb;132(1):109-19.
- [3]. Gray ME, et al. Dual targeting of EGFR and ERBB2 pathways produces a synergistic effect on cancer cell proliferation and migration in vitro. *Vet Comp Oncol.* 2017 Sep;15(3):890-909.

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

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