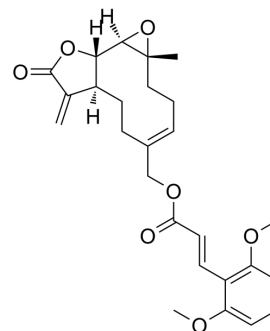


anti-TNBC agent-1

Cat. No.:	HY-145143
CAS No.:	2289585-58-4
Molecular Formula:	C ₂₆ H ₃₀ O ₇
Molecular Weight:	454.51
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	anti-TNBC agent-1 is a potent anti-triple-negative breast cancer (TNBC) agent. anti-TNBC agent-1 exhibits potent activity against different breast cancer cells with IC ₅₀ values ranging from 0.20 μM to 0.27 μM. anti-TNBC agent-1 induces apoptosis of SUM-159 cells through mitochondria pathway and causes G1 phase arrest of SUM-159 cells ^[1] .
In Vitro	<p>anti-TNBC agent-1 (compound 7) exhibits potent activity against MDA-MB231, SUM-159, MCF-7, Bcap-37, 4T1 cells with IC₅₀ values ranging from 0.20 μM to 0.27 μM. anti-TNBC agent-1 shows 11.6- to 18.6-fold improvement comparing to that of the parent compound parthenolide with IC₅₀ values of 2.68-4.63 μM. anti-TNBC agent-1 is more active than the positive control drug Adriamycin (ADR)^[1].</p> <p>anti-TNBC agent-1 (2 μM and 5 μM; 48 hours; SUM-159 cells) exhibits significant stronger effect on induction of cell apoptosis compared with that of Parthenolide^[1].</p> <p>anti-TNBC agent-1 has selective cytotoxicity against breast cancer cells (IC₅₀=0.22 μM) being compared with 3T3 cells (IC₅₀=8.13 μM)^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Ge W, et al. Synthesis and structure-activity relationship studies of parthenolide derivatives as potential anti-triple negative breast cancer agents. *Eur J Med Chem.* 2019;166:445-469.

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

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