Product Data Sheet

HDAC-IN-42

Cat. No.: HY-147892

CAS No.: 2454024-18-9 Molecular Formula: $C_{20}H_{15}NO_7$

Molecular Weight: 381.34

Target: HDAC; Apoptosis

Pathway: Cell Cycle/DNA Damage; Epigenetics; Apoptosis

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

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BIOLOGICAL ACTIVITY

| Description | HDAC-IN-42 (compound 14f) is a potent and selective HDAC inhibitor with IC $_{50}$ values of 0.19 and 4.98 μ M for HDAC1 and HDAC6, respectively. HDAC-IN-42 shows anticancer and anti-proliferative activity. HDAC-IN-42 induces apoptosis and cell cycle arrest at G2/M phase ^[1] . | |
|---------------------------|---|--------------------------------------|
| IC ₅₀ & Target | HDAC1 0.19 μM (IC ₅₀) | HDAC6 4.98 μM (IC ₅₀) |
| In Vitro | HDAC-IN-42 (compound 14f) shows anti-proliferative activity with C_{50} s of 9.56, 13.32, 10.46, 6.91 μM for MCF-7, HCT-116, HepG2, Hela cells, respectively ^[1] . HDAC-IN-42 (1, 5, 10 μM; 24 h) reduces the colony formation and increases the expression of histone H3 and α -tubulin in HeLa cells ^[1] . HDAC-IN-42 (1, 5, 10 μM; 48 h) induces apoptosis and cell cycle arrest at G2/M phase ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. | |

REFERENCES

[1]. Ding J, et al. Design, synthesis and biological evaluation of coumarin-based N-hydroxycinnamamide derivatives as novel histone deacetylase inhibitors with anticancer activities. Bioorg Chem. 2020 Aug;101:104023.

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