Proteins

Inhibitors



QTX125

Cat. No.: HY-120448 CAS No.: 1279698-31-5 Molecular Formula: $C_{23}H_{19}N_3O_5$ Molecular Weight: 417.41

Target: HDAC; Apoptosis

Pathway: Cell Cycle/DNA Damage; Epigenetics; Apoptosis

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

Analysis.

Product Data Sheet

BIOLOGICAL ACTIVITY

Description	QTX125 is a potent and highly selective HDAC6 inhibitor. QTX125 exhibits excellent selectivity over other HDACs. QTX125 has
	antitumor effects $^{[1]}$.

IC₅₀ & Target HDAC6

In Vitro

QTX125 (25-500 nM; 24-48 hours) treatment induces the subsequent apoptosis demonstrated by annexin V/propidium iodide double staining and the cleavage of caspase-9, caspase-8, caspase-3, and PARP^[1].

In MCL cell lines MINO, REC-1, IRM-2 and HBL-2 cells, QTX125 (10 nM, 10 μM, 100 μM) induces dose-dependent hyperacetylation of α -tubulin^[1].

QTX125 has the strongest growth-inhibitory effect in Burkitt cell lymphoma, follicular lymphoma, and mantle cell lymphoma $(MCL)^{[1]}$.

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

Apoptosis Analysis^[1]

Cell Line:	MINO, REC-1, IRM-2 and HBL-2 cells
Concentration:	25 nM, 50 nM, 100 nM, 500 nM
Incubation Time:	24 hours, 48 hours
Result:	Inhibited annexin V/propidium iodide double staining.
Western Blot Analysis ^[1]	
Cell Line:	MINO, REC-1, IRM-2 and HBL-2 cells
Concentration:	25 nM, 50 nM, 100 nM, 500 nM
Incubation Time:	24 hours
Result:	Inhibited the cleavage of caspase-9, caspase-8, caspase-3, and PARP.

In Vivo

QTX125 (60 mg/kg; i.p.; daily dosing for 5 days; for 4 weeks) treatment inhibits tumor growth in REC-1 or MINO cells xenografted in nude $mice^{[1]}$.

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

Animal Model:	Nude mice bearing REC-1 or MINO cells ^[1]
Dosage:	60 mg/kg
Administration:	Intraperitoneal administration; daily dosing for 5 days; for 4 weeks
Result:	Inhibited tumor growth in REC-1 or MINO cells xenografted in nude mice.

REFERENCES

[1]. Montserrat Pérez-Salvia, et al. In vitro and in vivo activity of a new small-molecule inhibitor of HDAC6 in mantle cell lymphoma. Haematologica. 2018 Nov;103(11):e537-e540.

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

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