Product Data Sheet

Bisabosqual A

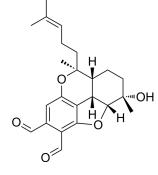
CAS No.: HY-163178 CAS No.: 180027-46-7

Molecular Formula: $C_{23}H_{28}O_5$ Molecular Weight: 384.47

Target: Apoptosis; Autophagy
Pathway: Apoptosis; Autophagy

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

Analysis.



BIOLOGICAL ACTIVITY

Description	Bisabosqual A, a potent asparagine synthetase (ASNS) inhibitor, with an IC $_{50}$ of 10.7 μ M. Bisabosqual A can covalently modify the K556 site of ASNS protein. Bisabosqual A promotes oxidative stress and apoptosis, while inhibiting autophagy, cell migration and epithelial-mesenchymal transition (EMT), impeding cancer cell development ^[1] .
In Vitro	Bisabosqual A suppresses the proliferation and migration of human non-small cell lung cancer A549 cells ^[1] . Bisabosqual A induces negative feedback pathways containing the GCN2-eIF2α-ATF4, PI3K-AKT-mTORC1 and RAF-MEK-ERK axes, but combination treatment of Bis A and rapamycin/torin-1 overcomes the potential drug resistance triggered by mTOR pathways ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Pan Y, et al. Bisabosqual A: A novel asparagine synthetase inhibitor suppressing the proliferation and migration of human non-small cell lung cancer A549 cells. Eur J Pharmacol. 2023 Dec 5;960:176156.

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

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