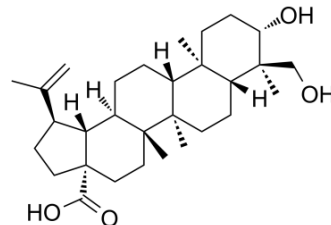


23-Hydroxybetulinic acid

Cat. No.:	HY-N0566
CAS No.:	85999-40-2
Molecular Formula:	C ₃₀ H ₄₈ O ₄
Molecular Weight:	472.7
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the COA.



BIOLOGICAL ACTIVITY

Description

23-hydroxybetulinic acid is one of the bioactive components responsible for its anticancer activity. In vitro: 23-hydroxybetulinic acid also shows different proliferation inhibitory activity against B16, HeLa, and HUVEC, with the IC₅₀ value of 78.5, 80, and 94.8 μM, respectively. 23-hydroxybetulinic acid can promote cell cycle arrest at S phase and induce apoptosis via intrinsic pathway. 23-hydroxybetulinic acid disrupts mitochondrial membrane potential significantly (p<0.01) and selectively downregulates the levels of Bcl-2, survivin and upregulates Bax, cytochrome C, cleaved caspase-9. 23-hydroxybetulinic acid can induce apoptosis in K562 cells. [1] 23-hydroxybetulinic acid enhances sensitivity of doxorubicin (DOX, ADR) on MCF-7/ADR cell lines, indicating its potential to be developed as a novel MDR modulator. [2] 23-HBA significantly improve the sensitivity of the tumor to doxorubicin. [3]

REFERENCES

- [1]. Liu M et al. Cytotoxicity of the compounds isolated from *Pulsatilla chinensis* saponins and apoptosis induced by 23-hydroxybetulinic acid. *Pharm Biol.* 2015 Jan;53(1):1-9.
- [2]. Zhang DM et al. BBA, a derivative of 23-hydroxybetulinic acid, potently reverses ABCB1-mediated drug resistance in vitro and in vivo. *Mol Pharm.* 2012 Nov 5;9(11):3147-59.
- [3]. Zheng Y et al. 23-Hydroxybetulinic acid from *Pulsatilla chinensis* (Bunge) Regel synergizes the antitumor activities of doxorubicin in vitro and in vivo. *J Ethnopharmacol.* 2010 Apr 21;128(3):615-22.

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

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