



Betulinic Acid Selectively Kills Melanoma Cells, Points to New Mechanism Against HIV

Betulinic acid, first extracted from an African tree in the Rhamnaceae, *Ziziphus mauritiana* Lam., is available in quantity from the European white birch, Betulaceae *Betula papyrifera* Marshall, it is found in the bark which this birch sheds naturally and causes its white appearance. It has been found to induce apoptosis, cell death, in melanoma cells without impacting healthy tissue, is moving towards clinic trials for humans and may also become a preventive for melanoma as an ingredient in suntan lotions. This compound has already shown promise against specific strains of HIV and may lead to further understanding of a mechanism involving a post binding step in replication of the virus.

additional information on betulinic acid including comments from John Pezzutto of the University of Illinois at Chicago, whose lab led the melanoma research, can be found in the electronic news magazine Environews at:

- [More on Betulinic Acid and Melanoma](#)

scroll down to the article titled: Barking Up the Right Tree. Then check:

- [the Betulinic Acid Page](#)

journal article on betulinic acid and melanoma:

Pisha E., H. Chai, I.S. Lee, et al. 1995. Discovery of betulinic acid as a selective inhibitor of human melanoma. **Nature Medicine** 1(10): 1046-51.

journal articles on betulinic acid and HIV:

Kashiwada, Y., F. Hashimoto, L.M. Cosentino, et al. 1996. Betulinic acid and dihydrobetulinic acid derivatives as potent HIV agents. **Journal of Medicinal Chemistry** 39(5): 1016-1017.;

Evers M., c. Poujade, F. Soler, et al. Betulinic acid derivatives: a new class of human immunodeficiency virus type 1 specific inhibitors with a new mode of action. 1996. **Journal of Medicinal Chemistry** 39 (5): 1056-1068.;

Soler, F., C. Poujade, M.Evers, et al. 1996. Betulinic acid derivatives: a new class of specific inhibitors of human immunodeficiency virus type 1 entry, **Journal of Medicinal Chemistry** 39(5): 1069-83.

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