The University of Texas RioGrande Valley

Office of Technology Commercialization

Chemical Synthesis Methods And CDDO/CDDO-EA Preparations

Triterpenoids are used for medicinal purposes in many Asian countries for antiinflammatory, antipyretic, analgesic, hepatoprotective, cardiotonic, sedative and tonic effects. This invention presents an improves method for terpenoid synthesis.

Problem

Synthesis protocols of triterpenoids have been reported to require extremely complicated multi-step processes, are time intensive, and lack in specificity for desired, sufficiently pure products, rendering the techniques inefficient and less suitable for commercially scalable production of pharmacologically active terpenoids

Solution

The present technology presents improved chemical synthesis strategies for producing pharmacologically active preparations of terpenoid derivatives, such as CDDO CDDO-Me, CDDO-EA, CDDO-Im and other CDDO derivatives and analogs, from oleanolic acid, in shorter time than previously reported.

HO HO H



Oleanolic acid

CDDO-EA

Value Proposition

This invention presents an improved, low cost, time saving, commercially scalable process for synthesizing a pharmacologically active synthetic triterpenoid CDDO and its derivatives and analogs, from oleanolic acid.

Competitive Advantages

- Cost effective
- Shorter synthesis time
- Increased efficiency compared to other production methods
- Commercially scalable production
 process

Status of Development

Seeking commercial partners

IP Status

- Licensing available
- Patent application filed

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