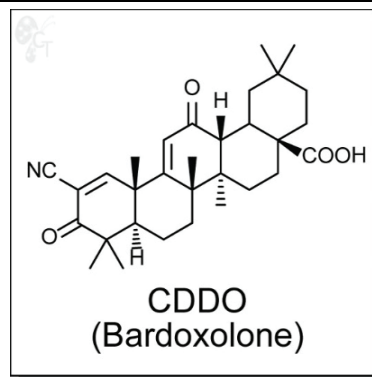




## Product Specification Sheet

**Product Name:** CDDO (Bardoxolone)

**Catalog Number:** C2336



### Technical information:

Chemical Formula:  $C_{31}H_{41}NO_4$

CAS #: 218600-44-3

Molecular Weight: 491.66

Purity: > 98%

Appearance: Brown solid

Solubility: Soluble in DMSO up to 10 mM

Chemical Name: 2-cyano-3,12-dioxo-oleana-1,9(11)-dien-28-oic acid

Storage: For longer shelf life, store solid powder or DMSO solution at -20°C desiccated.

Shelf Life: In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

**Handling:** • To make 10 mM stock solution, add 0.203mL of DMSO for each mg of CDDO (Bardoxolone).

- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

**Biological Activity:** CDDO is a synthetic oleanane triterpenoid. It is 400,000x more potent than natural product oleanolic acid in inhibiting cellular iNOS production when stimulated by IFN- $\gamma$ , TNF-alpha, and IL-1 [1]. The mechanism of action of CDDO remain elusive, despite its broad biological activities, including proliferation inhibition, apoptosis induction[2], and oxidative stress and inflammation suppression.

CDDO-methyl ester, an orally-available form of CDDO, is undergoing clinical development for the treatment of advanced chronic kidney disease (CKD) in type 2 diabetes mellitus patients.

- Reference:**
1. Sporn MB, et al. New synthetic triterpenoids: potent agents for prevention and treatment of tissue injury caused by inflammatory and oxidative stress. *J Nat Prod.* 2011; 74(3):537-45. Pubmed ID: 21309592
  2. Suh N, et al. A novel synthetic oleanane triterpenoid, 2-cyano-3,12-dioxoolean-1,9-dien-28-oic acid, with potent differentiating, antiproliferative, and anti-inflammatory activity. *Cancer Res.* 1999; 59(2):336-41. Pubmed ID: 9927043

To reorder: <http://www.cellagentech.com/CDDO-Bardoxolone/>

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*