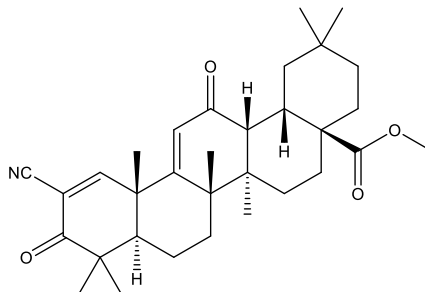


Catalog # 10-5449

CDDO-Me

CAS# 218600-53-4

2-Cyano-3,12-dioxooleana-1,9(11)-dien-28-oic acid methyl ester; Bardoxolone methyl; NSC-713200; RTA 402; TP-155
Lot # X109128



CDDO-Me is a potent activator of Nrf2 target transcription via interaction with thiol groups of Keap1, an Nrf2 partner, in phase 2 response against oxidative stress.¹ Inhibits the NF- κ B pathway via inhibition of IKK α activation *in vitro*² and reduces expression of proinflammatory cytokines *in vivo*³. Alters tumor microenvironment causing breast tumor associated macrophages to switch from tumor-promoting to tumor-inhibiting characteristics *in vitro*.⁴ Reduces cancer stem cell marker expression in Ec109 and KYSE70 cells.⁵

- 1) Dinkova-Kostova *et al.* (2005) *Extremely potent triterpenoid inducers of the phase 2 response: correlations of protection against oxidant and inflammatory stress*; Proc. Natl. Acad. Sci. USA **102** 4584
- 2) Shishodia *et al.* (2006) *A synthetic triterpenoid, CDDO-Me, inhibits I κ B α kinase and enhances apoptosis induced by TNF and chemotherapeutic agents through down-regulation of expression of nuclear factor kappaB-regulated gene products in human leukemic cells*; Clin. Cancer Res. **12** 1828
- 3) Wang *et al.* (2015) *Therapeutic effects of C-28 methyl ester of 2-cyano-3,12-dioxooleana-1,9-dien-28-oic acid (CDDO-Me; bardoxolone methyl) on radiation-induced lung inflammation and fibrosis in mice*; Drug Des. Devel. Ther. **9** 3163
- 4) Ball *et al.* (2020) *CDDO-Me Alters the Tumor Microenvironment in Estrogen Receptor Negative Breast Cancer*; Sci. Rep. **10** 6560
- 5) Wang *et al.* (2015) *Bardoxolone methyl induces apoptosis and autophagy and inhibits epithelial-to-mesenchymal transition and stemness in esophageal squamous cancer cells*; Drug Des. Devel. Ther. **9** 993

PHYSICAL DATA

Molecular Weight:	505.70
Molecular Formula:	C ₃₂ H ₄₃ NO ₄
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (25 mg/ml with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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