

Revision 1

Store at -20C

#35333

CDDO-Me

5 mg



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
www.cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not For Use In Diagnostic Procedures.

Background

CDDO-Me (bardoxolone methyl) is a synthetic triterpenoid that induces apoptosis and differentiation in cancer cells, and exhibits strong antiproliferative and antiangiogenic activities (1). CDDO-Me activates nuclear factor-like 2 (NRF2) transcriptional activator, which regulates oxidative stress response gene expression through binding of antioxidant response element (ARE) promoter gene regions. CDDO-Me interacts with the NRF2 inhibitor I κ Nf2 (also called KEAP1), resulting in the release of NRF2 from the proteasome pathway and translocation of NRF2 into the nucleus (2). Additionally, CDDO-Me binds IKK β to block the targeting of NF- κ B p65 to the nucleus and inhibits NF- κ B activation and downstream pro-inflammatory signaling pathways (3). CDDO-Me has been studied as an anticancer and anti-inflammatory drug, with potential to treat patients with chronic kidney disease associated with diabetes (4). Low doses of CDDO-Me may exert therapeutic effects on cardiac function in models of chronic heart failure (5).

Molecular Formula

C₃₂H₄₃NO₄

Molecular Weight

505.7 g/mol

Purity

>98%

CAS

218600-53-4

Solubility

Soluble in DMSO at 25 mg/mL.

Storage

Store lyophilized at -20°C, desiccated. In lyophilized form, the chemical is stable for 24 months. Once in solution, store at -20°C and use within 3 months to prevent loss of potency. *Aliquot to avoid multiple freeze/thaw cycles.*

Directions for Use:

CDDO-Me is supplied as a lyophilized powder. For a 10 mM stock, reconstitute 5 mg of powder in 0.99 mL of DMSO. Working concentrations and length of treatment can vary depending on the desired effect.

Background References

1. Borella, R. et al. (2019) *Molecules* 24, 4097. doi: 10.3390/molecules24224097.
2. Liby, K.T. and Sporn, M.B. (2012) *Pharmacol Rev* 64, 972-1003.
3. Wang, YY et al. (2014) *Drug Des Devel Ther* 8, 2075-88.
4. Kanda, H. and Yamawaki, K. (2020) *Clin Exp Nephrol* 24, 857-864.
5. Tian, C. et al. (2019) *J Pharmacol Exp Ther* 371, 642-651.

APPLICATIONS KEY

CROSS-REACTIVITY KEY H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr:

homo. Rab: rabbit All: all species expected

<https://www.cellsignal.com/datasheet.jsp?productId=35333&images=0&protocol=0>

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

#35333

CDDO-Me

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.

CSTLT_86_20200512

Orders: 877-616-CELL (2355) • orders@cellsignal.com • Support: 877-678-TECH (8324) • info@cellsignal.com • Web: www.cellsignal.com