## PRODUCT INFORMATION



E3330

Item No. 32830

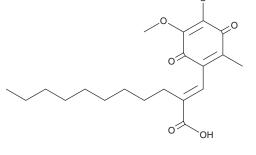
CAS Registry No.: 136164-66-4

(2E)-2-[(4,5-dimethoxy-2-methyl-3,6-dioxo-1,4-Formal Name:

cyclohexadien-1-yl)methylene]-undecanoic acid

Synonym: MF:  $C_{21}H_{30}O_6$ 378.5 FW: **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



## **Laboratory Procedures**

E3330 is supplied as a solid. A stock solution may be made by dissolving the E3330 in the solvent of choice, which should be purged with an inert gas. E3330 is soluble in the organic solvent DMSO.

## Description

E3330 is an inhibitor of apurinic-apyrimidinic endonuclease 1/redox factor-1 (APE1/Ref-1) redox activity.  $^{1,2}$  It inhibits APE1-mediated AP-1 DNA binding activity with an IC $_{50}$  value of 6.5  $\mu$ M in a redox EMSA but has no effect on APE1-mediated DNA repair activity in endonuclease or gap-filling assays when used at concentrations ranging from 0.01 to 50  $\mu$ M.<sup>1</sup> E3330 reduces basal activation of NF- $\kappa$ B, AP-1, and HIF-1 in reporter assays using PANC-1 pancreatic cancer cells.<sup>2</sup> It inhibits proliferation of PaCa-2 and PANC-1 pancreatic cancer cells (EC<sub>50</sub>s = 135 and 87  $\mu$ M, respectively). E3330 (25 mg/kg) inhibits tumor growth in a PaCa-2 mouse xenograft model and pancreatic cancer patient-derived xenograft (PDX) mouse models.

## References

- 1. Luo, M., Delaplane, S., Jiang, A., et al. Role of the multifunctional DNA repair and redox signaling protein Ape1/Ref-1 in cancer and endothelial cells: Small-molecule inhibition of the redox function of Ape1. Antioxid. Redox Signal. 10(11), 1853-1867 (2008).
- 2. Fishel, M.L., Jiang, Y., Rajeshkumar, N.V., et al. Impact of APE1/Ref-1 redox inhibition on pancreatic tumor growth. Mol. Cancer Ther. 10(9), 1698-1708 (2011).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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**CAYMAN CHEMICAL** 

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM