# Product Datasheet

## APE1 Redox Inhibitor
## NBP1-49581

Unit Size: 5 mg

Store at -20C in powder form. Store at -80C once reconstituted.

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**Publications: 13**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
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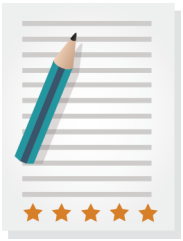


# NBP1-49581

APE1 Redox Inhibitor

## Product Information

| | |
|---|---|
| **Unit Size** | 5 mg |
| **Concentration** | Concentration is not relevant for this product. Please see the protocols for proper use of this product. |
| **Storage** | Store at -20C in powder form. Store at -80C once reconstituted. |
| **Clone** | E3330 |
| **Buffer** | This product is supplied as a powder. It is soluble in DMSO (>20 mg/mL). |

## Product Description

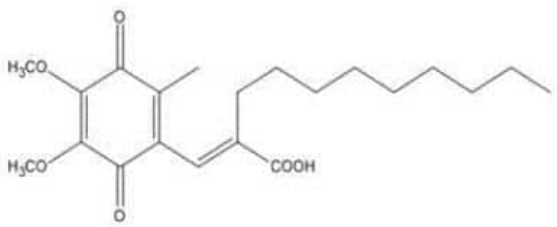
| | |
|---|---|
| **Description** | E3330 Chemical Information:<br>Synonym: (2E)-2-[(4,5-Dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methylene]-undecanoic acid<br>Molecular Weight: 378.459<br>Empirical Formula: C21H30O6<br>CAS Number: 136164-66-4<br>HPLC purity is >= to 97%<br>Solubility: DMSO: >20 mg/mL<br>Form: powder<br>Color: orange |
| **Specificity/Sensitivity** | E3330 is a chemical that inhibits the redox activity of APE1. |
| **Notes** | E3330 Chemical Information:<br>Synonym: (2E)-2-[(4,5-Dimethoxy-2-methyl-3,6-dioxo-1,4-cyclohexadien-1-yl)methylene]-undecanoic acid<br>Molecular Weight: 378.459<br>Empirical Formula: C21H30O6<br>CAS Number: 136164-66-4<br>HPLC purity is >= to 97%<br>Solubility: DMSO: >20 mg/mL<br>Form: powder<br>Color: orange |

## Product Application Details

| | |
|---|---|
| **Application Notes** | E3330 is useful for inhibiting APE1 redox activity. |

## Images

APE1 Redox Inhibitor [NBP1-49581] - Chemical Structure of E3330 [NBP1-49581]



## Publications

Lang Pan, Wenjing Hao, Yaoyao Xue, Ke Wang, Xu Zheng, Jixian Luo, Xueqing Ba, Yang Xiang, Xiaoqun Qin, Jesper Bergwik, Lloyd Tanner, Arne Egesten, Allan R Brasier, Istvan Boldogh 8-Oxoguanine targeted by 8-oxoguanine DNA glycosylase 1 (OGG1) is central to fibrogenic gene activation upon lung injury Nucleic Acids Research 2023-02-22 [PMID: 36651270]

Sriramajayam K, Peng D, Lu H et al. Activation of NRF2 by APE1/REF1 is redox-dependent in Barrett\'s related esophageal adenocarcinoma cells Redox biology 2021-04-19 [PMID: 33887608]

Lu H, Bhat AA, Peng D et al. APE1 upregulates MMP-14 via redox-sensitive ARF6-mediated recycling to promote cell invasion of esophageal adenocarcinoma Cancer Res. 2019-07-15 [PMID: 31308045]

Cesaratto L, Codarin E, Vascotto C et al. Specific inhibition of the redox activity of ape1/ref-1 by e3330 blocks tnf-a-induced activation of IL-8 production in liver cancer cell lines. PLoS One 2013-08-15 [PMID: 23967134]

Zhang J, Luo M, Marasco D et al. Inhibition of apurinic/apyrimidinic endonuclease I's redox activity revisited. Biochemistry. 2013-04-30 [PMID: 23597102]

Cardoso AA, Jiang Y, Luo M et al. APE1/Ref-1 regulates STAT3 transcriptional activity and APE1/Ref-1-STAT3 dual-targeting effectively inhibits pancreatic cancer cell survival. PLoS One 2012-01-01 [PMID: 23094050]

Luo M, Zhang J, He H et al. Characterization of the redox activity and disulfide bond formation in apurinic/apyrimidinic endonuclease. Biochemistry. 2012-01-17 [PMID: 22148505]

Vasko MR, Guo C, Thompson EL, Kelley MR. The repair function of the multifunctional DNA repair/redox protein APE1 is neuroprotective after ionizing radiation. DNA Repair (Amst). 2011-09-05 [PMID: 21741887]

Fishel ML, Jiang Y, Rajeshkumar NV et al. Impact of APE1/Ref-1 redox inhibition on pancreatic tumor growth. Mol Cancer Ther. 2011-09-01 [PMID: 21700832]

Jedinak A, Dudhgaonkar S, Kelley MR, Sliva D. Apurinic/Apyrimidinic endonuclease 1 regulates inflammatory response in macrophages. Anticancer Res 2011-02-01 [PMID: 21378315]

Jiang A, Gao H, Kelley MR, Qiao X. Inhibition of APE1/Ref-1 redox activity with APX3330 blocks retinal angiogenesis in vitro and in vivo. Vision Res 2011-01-01 [PMID: 20937296]

Hiramoto M, Shimizu N, Nishi T, Shima D, Aizawa S, Tanaka H, Hatakeyama M, Kawaguchi H, Handa H. High-performance affinity beads for identifying anti-NF-kappa B drug receptors. Methods Enzymol;353:81-8. 2002-01-01 [PMID: 12078530]

More publications at http://www.novusbio.com/NBP1-49581

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