



Product Information

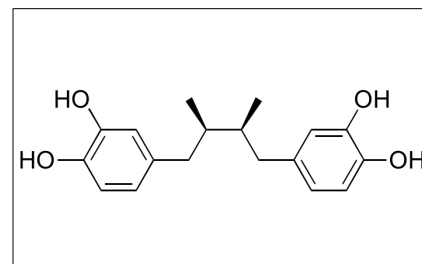
Product ID N5669
CAS No. 500-38-9
Chemical Name 4,4'-(2,3-Dimethyl-1,4butanediyl)bis[1,2-benzenediol]

Synonym NDGA, Dihydronguaiaretic acid, Pyrocatechol, 4,4'-(2,3-dimethyltetramethylene)di-

Formula C₁₈H₂₂O₄
Formula Wt. 302.36
Melting Point 184-186 °C
Purity ≥97%
Solubility Soluble in ethanol, methanol, or hot water.

Store Temp Ambient
Ship Temp Ambient

Description Nordihydroguaiaretic acid (NDGA) is a phenol found in the creosote bush that exhibits antioxidative, antiviral, anti-angiogenic, anti-metastatic, anti-inflammatory, anti-hyperlipidemic, anti-osteoporotic, anti-aging, neuromodulatory, anti-parasitic, antifungal, and anticancer chemotherapeutic activities. NDGA scavenges ROS, inhibits 5-lipoxygenase, and activates Nrf2. This compound inhibits dengue virus replication by preventing viral assembly; it also inhibits growth of *Culex* and *Candida*. In animal models, NDGA increases overall life span and inhibits acetylcholinesterase (AChE) and butylcholinesterase (BChE). In vivo, NDGA inhibits angiogenesis and suppresses invasion and proliferation of glioma cells. In various models, NDGA inhibits Ca²⁺ signaling and PAR2 activity, decreasing expression of IL-8, ICAM-1, IgE, and involucrin. In animal models, this compound increases expression of PPAR α and decreases levels of serum triglycerides and liver weight. Additionally, NDGA inhibits osteoclastogenesis in vitro and decreases bone destruction in vivo. In cellular and animal models of breast cancer, NDGA inhibits mTORC1, decreases expression of VEGF, cyclin D1, and HIF-1 α , and suppresses cellular proliferation and tumor growth.



Bulk quantities available upon request

Product ID	Size
N5669	500 mg
N5669	1 g
N5669	5 g

References Hernández-Damián J, Andérica-Romero AC, Pedraza-Chaverri J. Paradoxical cellular effects and biological role of the multifaceted compound nordihydroguaiaretic Acid. Arch Pharm (Weinheim). 2014 Oct;347(10):685-97. PMID: 25100573.

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Yang X, Cui W, Yu S, et al. A synthetic dl-nordihydroguaiaretic acid (Nordy), inhibits angiogenesis, invasion and proliferation of glioma stem cells within a zebrafish xenotransplantation model. PLoS One. 2014 Jan 15;9(1):e85759. PMID: 24454929.

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Zhang H, Shen WJ, Cortez Y, et al. Nordihydroguaiaretic acid improves metabolic dysregulation and aberrant hepatic lipid

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.