

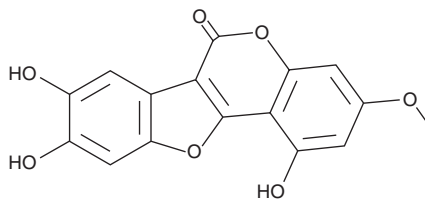
# PRODUCT INFORMATION



## Wedelolactone

Item No. 11796

**CAS Registry No.:** 524-12-9  
**Formal Name:** 1,8,9-trihydroxy-3-methoxy-6H-benzofuro[3,2-c][1]benzopyran-6-one  
**Synonym:** IKK Inhibitor II  
**MF:** C<sub>16</sub>H<sub>10</sub>O<sub>7</sub>  
**FW:** 314.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 253, 351 nm  
**Supplied as:** A crystalline 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

Wedelolactone is supplied as a crystalline solid. A stock solution may be made by dissolving the wedelolactone in the solvent of choice. Wedelolactone is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of wedelolactone in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Wedelolactone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, wedelolactone should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Wedelolactone has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Wedelolactone is a natural coumestan originally isolated from plants used in herbal therapies. It inhibits NF-κB signaling at the level of IKK action, resulting in suppression of NF-κB-mediated gene expression at concentrations of 1-100 μM.<sup>1-3</sup> Wedelolactone can also inhibit hepatitis C virus NS5B RNA-dependent RNA polymerase *in vitro* (IC<sub>50</sub> = 36 μM), STAT1 dephosphorylation (50 μM), and EZH2-EED interactions (K<sub>d</sub> = 2.8 μM).<sup>4-6</sup> Prolonged incubation of HepG2 liver cells with wedelolactone alters lipid metabolism through increased expression of AMPK, PPARα, lipoprotein lipase, and low-density lipoprotein receptor.<sup>7</sup>

### References

1. Kobori, M., Yang, Z., Gong, D., *et al.* *Cell Death Differ.* **11(1)**, 123-130 (2004).
2. Yuan, F., Chen, J., Sun, P., *et al.* *J. Biomed. Sci.* **20:84**, (2013).
3. Alquézar, C., de la Encarnación, A., Moreno, F., *et al.* *J. Psychiatry Neurosci.* **41(1)**, (2016).
4. Kaushik-Basu, N., Bopda-Waffo, A., Talele, T.T., *et al.* *Nucleic Acids Res.* **35(5)**, 1482-1496 (2008).
5. Chen, Z., Sun, X., Shen, S., *et al.* *J. Biol. Chem.* **288(20)**, 14417-14427 (2013).
6. Chen, H., Gao, S., Li, J., *et al.* *Oncotarget* **6(15)**, 13049-13059 (2015).
7. Zhao, Y., Peng, L., Yang, L., *et al.* *PLoS One* **10(7)**, (2015).

#### WARNING

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

#### SAFETY DATA

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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/07/2022

#### 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