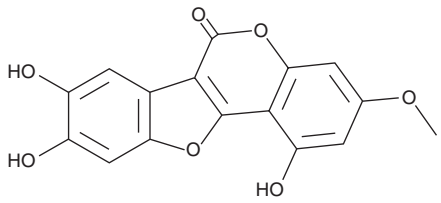
PRODUCT INFORMATION

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:	$C_{16}H_{10}O_7$
FW:	314.3
Purity:	≥98%
UV/Vis.:	λ_{max}: 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.[1-3] Wedelolactone can also inhibit hepatitis C virus NS5B RNA-dependent RNA polymerase *in vitro* (IC_{50} = 36 µM), STAT1 dephosphorylation (50 µM), and EZH2-EED interactions (K_d = 2.8 µM).[4-6] Prolonged incubation of HepG2 liver cells with wedelolactone alters lipid metabolism through increased expression of AMPK, PPARα, lipoprotein lipase, and low-density lipoprotein receptor.[7]

References

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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