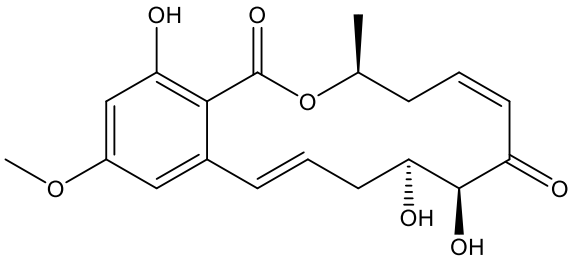
Catalog # 10-3023

(5Z)-7-Oxozeaenol

CAS# 253863-19-3

(3*S*,5*Z*,8*S*,9*S*,11*E*)-3,4,9,10-Tetrahydro-8,9,16-trihydroxy-14-methoxy-3-methyl-1*H*-2-benzoxacyclotetradecin-1,7(8*H*)-dione; LL-Z-1640-2

Lot # X109071



(5Z)-7-Oxozeaenol is a potent and selective inhibitor of TAK1 (mitogen activated protein kinase kinase kinase) IC_{50} = 8 nM.[1] Selective over MEKK1 and MEKK4. Blocks IL-1-induced activation of TAK1 in cell culture.[1] Blocks the production of pro-inflammatory cytokines and displays anti-inflammatory activity in various models.[2-4]

References/Citations:

1) Ninomiya-Tsuji *et al*. (2003), *A resorcylic acid lactone, 5Z-7-oxozeaenol, prevents inflammation by inhibiting the catalytic activity of TAK1 MAPK kinase kinase*; J. Biol. Chem., **278** 18485
2) Windheim *et al*. (2007), *Molecular mechanisms involved in the regulation of cytokine production by muramyl dipeptide*; Biochem. J., **404** 179
3) Xu *et al*. (2016), *Blockade of TGF-ß-activated kinase 1 prevents advanced glycation end products-induced inflammatory response in macrophages*; Cytokine, **78** 62
4) Ivshina *et al.* (2015), *CPEB regulation of TAK1 synthesis mediates cytokine production and the inflammatory immune response*; Mol. Cell. Biol., **35** 610

PHYSICAL DATA

Molecular Weight:	362.38
Molecular Formula:	$C_{19}H_{22}O_7$
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (9 mg/ml); ethanol (3 mg/ml)
Physical Description:	White to off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.
	Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462
www.focusbiomolecules.com