

**Product Name:** LL Z1640-2

**Product Number:** L038

**CAS Number:** 253863-19-3

**Molecular Formula:**  $C_{19}H_{22}O_7$

**Molecular Weight:** 362.4

**Appearance:** White solid

**Storage Conditions:** -20°C

**Description:** LL Z1640-2 (5Z-7-oxozeaenol) is a cis-enone resorcylic acid lactone first reported in 1978 and later rediscovered as an irreversible and highly selective TAK 1 inhibitor. TAK1 is a MAPKKK involved in the p38 signalling cascade for pro-inflammation signals such as cytokines. LL Z1640-2 effectively prevents inflammation in animal models.

LL Z1640-2 is soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

**References:** New zearalenone related macrolides and isocoumarins from an unidentified fungus. Ellestad G. A. et al. , J. Org. Chem. 1978, 43, 2339.

A resorcylic acid lactone, 5Z-7-oxozeaenol, prevents inflammation by inhibiting the catalytic activity of TAK1 MAPK kinase kinase. J. Ninomiya-Tsuji J. et al. , J. Biol. Chem. 2003, 278, 18485.