

Product Name: Chlorothricin

Product Number: C171

CAS Number: 34707-92-1

Molecular Formula: $C_{50}H_{63}ClO_{16}$

Molecular Weight: 955.5

Appearance: White solid

Storage Conditions: -20°C

Description: The tetronic acid, chlorothricin, is an unusual macrocyclic antibiotic from a *Streptomyces* sp., related to kijanimicin, saccharocarins, tetrocarins and versipelostatin. Chlorothricin inhibits cholesterol biosynthesis from mevalonate and inhibits pyruvate carboxylases purified from rat liver, chicken liver and *Azotobacter vinelandii*.

Chlorothricin is soluble in ethanol, methanol, DMF and DMSO.

References: New cholesterol biosynthesis inhibitors MC-031 (O-demethylchlorothricin), -032 (O-demethyl hydroxy-chlorothricin), -033 and -034. Kawashima A. et al. J. Antibiot. 1992, 45, 207.

Mode of action of the macrolide-type antibiotic, chlorothricin. Effect of the antibiotic on the catalytic activity and some structural parameters of pyruvate carboxylases purified from rat and chicken liver. Schindler P.W. et al. Eur. J. Biochem. 1975, 55, 543.

Effect on tumor cells of blocking survival response to glucose deprivation. Park H.R. J. Natl. Cancer. Inst. 2004, 96, 1300.

Apoptosis and inactivation of the PI3-kinase pathway by tetrocarcin A in breast cancers. Nakajima H. Biochem Biophys Res Commun. 2007, 356, 260.