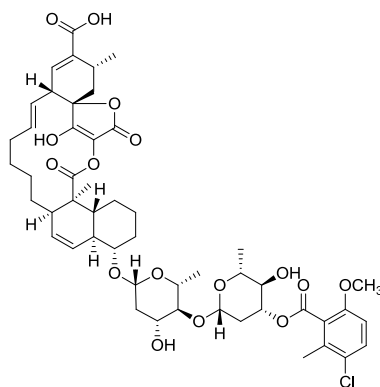


## Chlorothricin

Code No.: **BIA-C1016**

Pack sizes: **1 mg, 5 mg**



Synonyms : K 818A

## Specifications

CAS #	: <b>34707-92-1</b>
Molecular Formula	: <b>C<sub>50</sub>H<sub>63</sub>ClO<sub>16</sub></b>
Molecular Weight	: <b>955.5</b>
Source	: <b><i>Streptomyces</i> sp.</b>
Appearance	: <b>White solid</b>
Purity	: <b>&gt;99% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.</b>

## Application Notes

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

## References

1. 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.
2. 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.
3. Effect on tumor cells of blocking survival response to glucose deprivation. Park H.R. *J. Natl. Cancer. Inst.* 2004, 96, 1300.
4. Apoptosis and inactivation of the PI3-kinase pathway by tetrocarcin A in breast cancers. Nakajima H. *Biochem Biophys Res Commun.* 2007, 356, 260.