

Product Data Sheet

Product Name: Monactin

Cat. No.: GC40613

Chemical Properties

Cas. No. 7182-54-9

SMILES O=C(O[C@H](C)C[C@]1([H])O[C@@]([C@@H]2C)([H])CC1)[C@H](C)[C@@]3([H])CC[C@](C[C@H](C)OC([C@H]([C@@]4([H])O[C@](C[C@H](OC([C@H](C)[C@]5([H])O[C@](CC5)([H])C[C@H](C)OC2=O)=O)CC)([H])CC4)C)=O)([H])O3

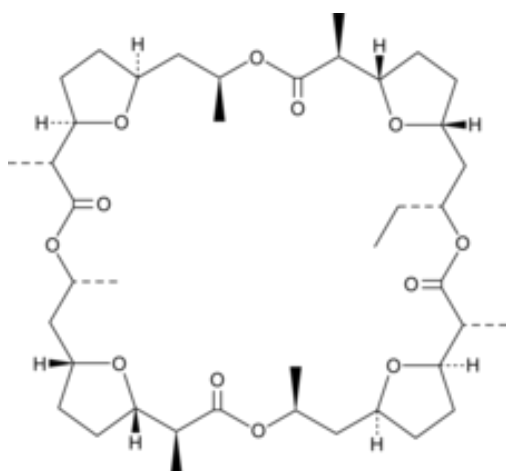
Formula C₄₁H₆₆O₁₂ M.Wt 751

Solubility DMF: Soluble, DMSO: Soluble, Ethanol: Soluble, Methanol: soluble
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



Background

Monactin is a mactrotetralide antibiotic originally isolated from *Streptomyces* and a non-selective ionophore for monovalent cations, including potassium, sodium, and lithium. It has low antimicrobial

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

activity but is more active than its homolog nonactin . Monactin induces swelling of rat liver mitochondria in medium containing either potassium or sodium, stimulates respiration, and uncouples oxidative phosphorylation. It also inhibits Wnt signaling via inhibition of TCF- β -catenin transcriptional activity.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA