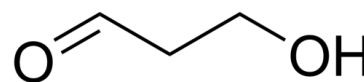


Data Sheet

Product Name:	Reuterin
Cat. No.:	CS-0144520
CAS No.:	2134-29-4
Molecular Formula:	C ₃ H ₆ O ₂
Molecular Weight:	74.08
Target:	Bacterial
Pathway:	Anti-infection
Solubility:	H ₂ O : 250 mg/mL (3374.73 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Reuterin is a broad-spectrum **antimicrobial** agent active against Gram positive and Gram negative bacteria, as well as yeasts, moulds and protozoa. Reuterin is produced by specific strains of *Lactobacillus reuteri* during anaerobic metabolism of glycerol. Reuterin also demonstrates potent antimicrobial activity against a broad panel of human and poultry meat *campylobacter* spp. Isolates [1][2]. *In Vitro*: Reuterin is water soluble, effective in a wide range of pH, resistant to proteolytic and lipolytic enzymes and has been therefore studied as a food preservative or auxiliary therapeutic agent. Reuterin is a potent antimicrobial with high activity against a broad panel of *C. jejuni* and *C. coli* isolates[1]. Reuterin is produced by certain strains of *L. reuteri* during anaerobic fermentation of glycerol and has a broad-spectrum antimicrobial property against enteric pathogens and intestinal bacteria[2].

References:

- [1]. Schaefer L, et al. The antimicrobial compound reuterin (3-hydroxypropionaldehyde) induces oxidative stress via interaction with thiol groups. *Microbiology (Reading)*. 2010;156(Pt 6):1589-1599.
- [2]. Asare PT, et al. Reuterin Demonstrates Potent Antimicrobial Activity Against a Broad Panel of Human and Poultry Meat *Campylobacter* spp. Isolates. *Microorganisms*. 2020;8(1):78. Published 2020 Jan 6.

CAIndexNames:

Propanal, 3-hydroxy-

SMILES:

O=CCCO

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

Tel: 610-426-3128

Fax: 888-484-5008

E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA