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ProductInformation

Oxolinic acid

Product Number **O 0877**
Storage Temperature 2-8 °C

Product Description

Molecular Formula: $C_{13}H_{11}NO_5$
Molecular Weight: 261.2
CAS Number: 14698-29-4
Melting Point: 314-316 °C (with decomposition)[1]
Synonyms: 5-ethyl-5,8-dihydro-8-oxo-1,3-dioxolo [4,5-g]quinoline-7-carboxylic acid; 1-ethyl-1,4-dihydro-6,7-methylenedioxy-4-oxo-3-quinolinecarboxylic acid; 1-ethyl-6,7-methylenedioxy-4-quinoline-3-carboxylic acid

Oxolinic acid is a quinoline compound that has antibacterial properties similar to nalidixic acid, which is particularly active against *Enterobacteriaceae*.[1,2] Oxolinic aid is an inhibitor of DNA gyrases, including DNA topoisomerases.[3-6] A study of the binding of oxolinic acid to DNA polynucleotides has been reported.[7]

A report has investigated the *in vitro* activity of oxolinic acid against *Vibrio anguillarum* isolated from diseased cod and the *in vivo* pharmacokinetics of oxolinic acid in the cod *Gadus morhua L*.[8] A study of the activity of oxolinic acid and other antibacterial compounds against bacteria in sewage sludge has been reported.[9]

Several HPLC methods have been described for the detection of oxolinic acid in chicken tissues and in marine organisms.[10-12]

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This product is soluble in 0.5 M NaOH (50 mg/ml), with heat as needed, yielding a clear, colorless solution. Stock solutions may also be prepared in 0.05 M NaOH.[6] This product is not soluble in DMSO or dimethylformamide.

References

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