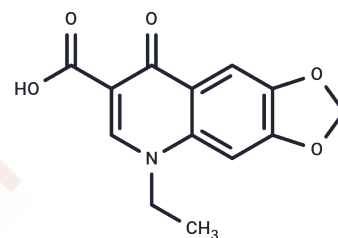


Oxolinic acid

Chemical Properties

CAS No. :	14698-29-4
Formula:	C ₁₃ H ₁₁ NO ₅
Molecular Weight:	261.23
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Oxolinic acid (Nidantin) is a synthetic antimicrobial related to NALIDIXIC ACID and used in URINARY TRACT INFECTIONS.
Targets(IC50)	Antibacterial, Antibiotic, DNA/RNA Synthesis, Dopamine Receptor
In vitro	Oxolinic acid, a quinolone antibacterial agent, inhibits reversibly the ATP-dependent replicative DNA synthesis in permeable cell systems as well as in cellophane disk lysates [4]. It also inhibits bacterial DNA gyrase but not eukaryotic topoisomerases, reversibly binding gyrase subunit A in gyrase-DNA complexes, blocking supercoiling activity and inhibiting DNA synthesis at 0.5-5 µg/ml[5][6][7].
In vivo	The antimicrobial agent oxolinic acid, injected i.p. in mice, induces a dose dependent increase in locomotor activity. the stimulant locomotor effect of oxolinic acid depends on the blockade of the neuronal dopamine uptake complex[2].

Solubility Information

Solubility	DMSO: < 1 mg/mL (insoluble or slightly soluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.828 mL	19.1402 mL	38.2804 mL
5 mM	0.7656 mL	3.828 mL	7.6561 mL
10 mM	0.3828 mL	1.914 mL	3.828 mL
50 mM	0.0766 mL	0.3828 mL	0.7656 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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O'Connor MB, et al. *J Mol Biol.* 1985, 181(4):545-550.

Staudenbauer WL. *Eur J Biochem.* 1976, 62(3):491-497.

Drlica K, et al. *Microbiol Mol Biol Rev.* 1997, 61(3):377-392.

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