Product Data Sheet

Product Name: Lasalocid sodium
Cat. No.: GC36427

Chemical Properties

Cas. No.	25999-20-6		
SMILES	O=C([O-])C1=C(CC[C@@H](C)[C@H](O)[C@H](C)C([C@@H]([C@H]2O[C@@]([C@H]3CC[C@](O)(CC)[C@H](C)O3)(CC)C[C@@H]2C)CC)=O)C=CC(C)=C1O.[Na+]		
Formula	$C_{34}H_{53}NaO_8$	M.Wt	612.77
Solubility	DMSO: 100 mg/mL (163.19 mM); Water: < 0.1 mg/mL (insoluble)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Lasalocid sodium		

Background

Lasalocid is a polyketide-synthase derived ionophore antibiotic originally isolated from *S. lasaliensis*.[1,2] It binds to monovalent and divalent cations, including potassium, sodium, calcium, and magnesium cations.[3] Lasalocid (0.01 and 0.1 ?g/ml) is active against *E. tenella*.[4] *In vivo*, lasalocid (125 ppm in the feed) reduces the severity of gastrointestinal lesions in chicks experimentally infected with *E. tenella*, *E. maxima*, *E. necatrix*, *E. brunetti*, or *E. acervulina*. It has been found in groundwater.[5] Formulations containing lasalocid have been used in the treatment of coccidiosis in poultry.

1.Migita, A., Watanabe, M., Hirose, Y., et al.Identification of a gene cluster of polyether antibiotic lasalocid from Streptomyces lasaliensisBiosci. Biotechnol. Biochem.73(1)169-176(2009) 2.Mitrovic, M., and Schildknecht, E.G.Anticoccidial activity of lasalocid (X-537A) in chicksPoult. Sci.53(4)1448-1455(1974) 3.Antonenko, Y.N., and Yaguzhinsky, L.S.The ion selectivity of nonelectrogenic ionophores measured on a bilayer lipid

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membrane: nigericin, monensin, A23187 and lasalocid ABiochim. Biophys. Acta938(2)125-130(1988) 4.Folz, S.D., Lee, B.L., Nowakowski, L.H., et al.Anticoccidial evaluation of halofuginone, lasalocid, maduramicin, monensin and salinomycinVet. Parasitol.28(1-2)1-9(1988) 5.Mooney, D., Richards, K.G., Danaher, M., et al.An investigation of anticoccidial veterinary drugs as emerging organic contaminants in groundwaterSci. Total Environ.746141116(2020)

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