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## **Product Information**

Product ID M5753 CAS No. 22373-78-0

Chemical Name 2-[5-Ethyltetrahydro-5-[tetrahydro-3-methyl-5-[tetra-hydro-6-hydroxy

-6-(hydroxymethyl)-3,5-dimethyl- 2H-pyran-2-yl]-2-furyl]-9-hydroxy-β- methoxy-α,γ,2,8-tetramethyl-1,6-dioxaspiro[4.5]- decane

Synonym Monensin sodium salt, Coban, Romemsin, Rumensin

Formula  $C_{36}H_{61}O_{11}$  Na Formula Wt. 692.86

Melting Point 267-269°C

Purity ≥98%

Solubility Insoluble in water. Soluble

in DMSO, ethanol, methanol, chloroform, other organic solvents.

Store Temp 4°C
Ship Temp Ambient

**Description** Monensin is a polyether antibiotic initially produced by *Streptomyces* that exhibits antibactieral and anti-parasitic activities.

Monensin is commercially used in cattle feed; it acts as an ionophore, transporting cations across cell membranes. Monensin

inhibits autophagy, interfering with the fusion of the autophagosome and the lysosome.

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## Bulk quanitites available upon request

 Product ID
 Size

 M5753
 500 mg

 M5753
 1 g

 M5753
 5 g

References Choi HS, Jeong EH, Lee TG, et al. Autophagy Inhibition with Monensin Enhances Cell Cycle Arrest and Apoptosis Induced by mTOR or Epidermal Growth Factor Receptor Inhibitors in Lung Cancer Cells. Tuberc Respir Dis (Seoul). 2013 Jul;75(1):9-17. PMID: 23946753.

Lavine MD, Arrizabalaga G. Analysis of monensin sensitivity in Toxoplasma gondii reveals autophagy as a mechanism for drug induced death. PLoS One. 2012;7(7):e42107. PMID: 22848721.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.