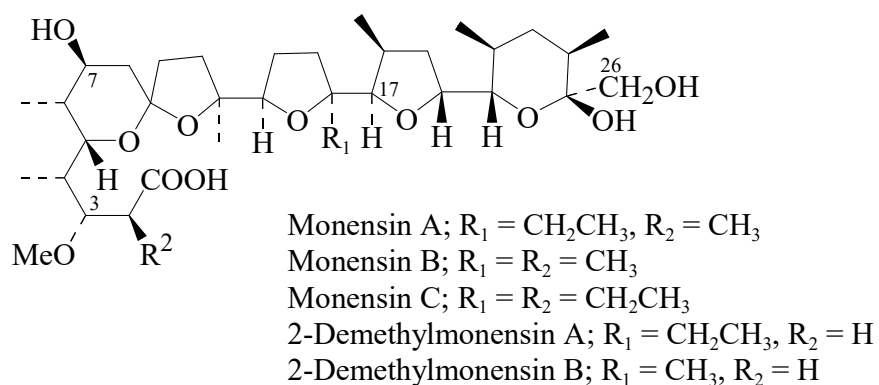




>>Entry Name: Monensin, 9CI, BAN, INN, USAN



Biological Source: Metab. of *Streptomyces cinnamonensis*

Use/Importance: Broad-spectrum anticomicrobial antibiotic, antifungal agent. Shows anti-HIV activity

>>Variant: Monensin A

Synonym(s): Monensic acid. Coban. Elancoban. Mintrate. Monelan. Romensin. Rumensin. A 3223A. Lilly 67314. Antibiotic A 3223A

CAS Registry Number: 17090-79-8

Molecular Formula: $\text{C}_{36}\text{H}_{62}\text{O}_{11}$

Molecular Weight: 670.879

Accurate Mass: 670.429215

Percentage Composition: C 64.45%; H 9.31%; O 26.23%

Melting Point: Mp 103-105°

Optical Rotation: $[\alpha]_{\text{D}} +47.7$

Solubility: BERDY SOL: Sol. MeOH, Et₂O; poorly sol. H₂O

pKa Value: $\text{p}K_{\text{a}}$ 6.65 (66% DMF aq.)

Hazard & Toxicity: Skin and eye irritant. LD₅₀ (rat, orl) 100 mg/kg. Cardiotoxic ; BERDY HAZD : LD₅₀ (mus, ipr) 16.8 mg/kg , LD₅₀ (mus, orl) 43.8 mg/kg

>>Derivative: Na salt

CAS Registry Number: 22373-78-0

Melting Point: Mp 267-269°

Optical Rotation: $[\alpha]_{\text{D}}^{25} +57.3$ (c, 1 in MeOH)

Hazard & Toxicity: LD₅₀ (rat, orl) 29 mg/kg

Fluka: 69864

Sigma: M2513

>>Derivative: Di-Ac, Me ester

Molecular Formula: $\text{C}_{41}\text{H}_{68}\text{O}_{13}$

Molecular Weight: 768.98

Accurate Mass: 768.465995

Percentage Composition: C 64.04%; H 8.91%; O 27.05%

Physical Description: Cryst.

Melting Point: Mp 113-114°

>>Derivative: 26-O-β-D-Glucopyranoside

Synonym(s): Antibiotic A 27106. A 27106

CAS Registry Number: 58936-31-5

Molecular Formula: $\text{C}_{42}\text{H}_{72}\text{O}_{16}$

Molecular Weight: 833.021

Accurate Mass: 832.48204

Percentage Composition: C 60.56%; H 8.71%; O 30.73%

Biological Source: Isol. from *Streptomyces candidus*

Biological Use/Importance: Antiviral antibiotic

>>Derivative: 26-O-[(2-Phenylethyl)carbamoyl]

Synonym(s): Antibiotic X 14667B. X 14667B