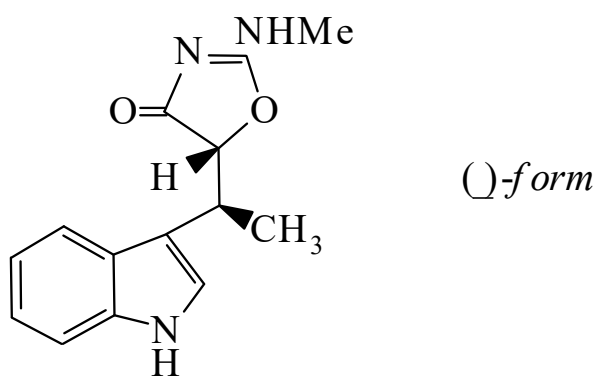




>>Entry Name: Indolmycin

Synonym(s): 5-[1-(1*H*-Indol-3-yl)ethyl]-2-(methylamino)-4(5*H*)-oxazolone, 9Cl. PA 155A. Antibiotic PA 155A



CAS Registry Number: 21200-24-8

Molecular Formula: C<sub>14</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>

Molecular Weight: 257.291

Accurate Mass: 257.116427

Percentage Composition: C 65.36%; H 5.88%; N 16.33%; O 12.44%

UV: [neutral] λ<sub>max</sub> 219 (ε 55600); 273 (ε 5500); 280 (ε 5760); 288 (ε 4930) (MeOH) (Derep)

Hazard & Toxicity: LD<sub>50</sub> (mus, scu) 800 mg/kg

>>Variant: (–)-form

Molecular Formula: C<sub>14</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>

Molecular Weight: 257.291

Accurate Mass: 257.116427

Percentage Composition: C 65.36%; H 5.88%; N 16.33%; O 12.44%

Biological Source: Isol. from *Streptomyces albus* and *Streptomyces griseus*

Use/Importance: Shows activity against gram-positive bacteria including mycobacteria. Antagonist of L-Tryptophan

Physical Description: Prisms (MeOH or EtOAc)

Melting Point: Mp 209-210°

Optical Rotation: [α]<sub>D</sub><sup>25</sup> –214 (c, 2 in MeOH)

Solubility: BERDY SOL: Sol. MeOH, Me<sub>2</sub>CO, butanol, EtOH; fairly sol. H<sub>2</sub>O, C<sub>6</sub>H<sub>6</sub>, Et<sub>2</sub>O; poorly sol. hexane

UV: [neutral] λ<sub>max</sub> 218 (E1%/1cm 1960); 273 (E1%/1cm 200); 281 (E1%/1cm 233); 288 (E1%/1cm 186) (MeOH) (Berdy) [neutral] λ<sub>max</sub> 219 (ε 55640); 273 (ε 5500); 280 (ε 5760); 288 (ε 4930) (EtOH) (Berdy)

Other Data: λ<sub>max</sub> 218, 273, 281 and 288 nm

>>Derivative: Dipicrate

Physical Description: Orange-red plates (EtOH/Et<sub>2</sub>O)

Melting Point: Mp 148-149°

>>Variant: (±)-form

Molecular Formula: C<sub>14</sub>H<sub>15</sub>N<sub>3</sub>O<sub>2</sub>

Molecular Weight: 257.291

Accurate Mass: 257.116427

Percentage Composition: C 65.36%; H 5.88%; N 16.33%; O 12.44%

Physical Description: Cryst. (Me<sub>2</sub>CO)

Melting Point: Mp 183.5-184°

Solubility: BERDY SOL: Sol. MeOH, C<sub>6</sub>H<sub>6</sub>; poorly sol. H<sub>2</sub>O, hexane

UV: [neutral] λ<sub>max</sub> 234 (E1%/1cm 419); 254 (E1%/1cm 342); 292 (E1%/1cm 95); 465 (E1%/1cm 125); 493 (E1%/1cm 162); 514 (E1%/1cm 200); 526 (E1%/1cm 117); 575 (E1%/1cm 15) (MeOH) (Berdy) [base] λ<sub>max</sub> 241 (E1%/1cm 482); 560 (E1%/1cm 181); 596 (E1%/1cm 154) (MeOH-NAOH) (Berdy) [acid] λ<sub>max</sub> 234 (E1%/1cm 434); 254 (E1%/1cm 352); 292 (E1%/1cm 100); 465 (E1%/1cm 135); 493 (E1%/1cm 172); 514 (E1%/1cm 122); 526 (E1%/1cm 115) (MeOH-HCl) (Berdy)

References: