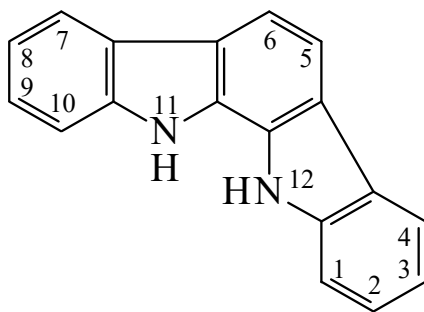




>>Entry Name: 11,12-Dihydroindolo[2,3-*a*]carbazole, 9Cl

Synonym(s): Indolo[2,3-*a*]carbazole



CAS Registry Number: 60511-85-5

Molecular Formula: C<sub>18</sub>H<sub>12</sub>N<sub>2</sub>

Molecular Weight: 256.306

Accurate Mass: 256.100048

Percentage Composition: C 84.35%; H 4.72%; N 10.93%

Source/Synthesis: Residue present in a number of microbial and marine alkaloids

Physical Description: Cryst. (EtOH)

Melting Point: Mp 370°

>>Derivative: *N*-Me

Molecular Formula: C<sub>19</sub>H<sub>14</sub>N<sub>2</sub>

Molecular Weight: 270.333

Accurate Mass: 270.115698

Percentage Composition: C 84.42%; H 5.22%; N 10.36%

Physical Description: Prisms (EtOH)

Melting Point: Mp 244-245°

>>Derivative: *N,N'*-Di-Me

Molecular Formula: C<sub>20</sub>H<sub>16</sub>N<sub>2</sub>

Molecular Weight: 284.36

Accurate Mass: 284.131348

Percentage Composition: C 84.48%; H 5.67%; N 9.85%

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

Melting Point: Mp 209°

>>Derivative: *N*-(6-Deoxy-β-D-gulopyranosyl)

Synonym(s): Tjipanazole G1

Molecular Formula: C<sub>24</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub>

Molecular Weight: 402.449

Accurate Mass: 402.157958

Percentage Composition: C 71.63%; H 5.51%; N 6.96%; O 15.90%

Biological Source: Minor alkaloid from the blue-green alga *Tolypothrix tjipanasensis*

Use/Importance: Exhibits antifungal activity

Optical Rotation: [α]<sub>D</sub> +9.1 (c, 1.0 in CHCl<sub>3</sub>)

UV: [neutral] λ<sub>max</sub> 256 (ε 35400); 270 (ε 32800); 287 (ε 18800); 324 (ε 20000); 343 (ε 5800); 359 (ε 4080) (MeOH) (Derep) [neutral] λ<sub>max</sub> 256 (ε 35380); 270 (ε 32790); 287 (ε 18790); 324 (ε 19960); 343 (ε 5800); 359 (ε 4080) (MeOH) (Berdy)

>>Derivative: *N*-α-L-Rhamnopyranosyl

Synonym(s): Tjipanazole G2

Molecular Formula: C<sub>24</sub>H<sub>22</sub>N<sub>2</sub>O<sub>4</sub>

Molecular Weight: 402.449

Accurate Mass: 402.157958

Percentage Composition: C 71.63%; H 5.51%; N 6.96%; O 15.90%

Biological Source: Minor constit. of *Tolypothrix tjipanasensis*

UV: [neutral] λ<sub>max</sub> 256 (ε 35400); 270 (ε 32800); 287 (ε 18800); 324 (ε 20000); 343 (ε 5800); 359 (ε 4080) (MeOH) (Derep)

#### References:

Mann, F.G. *et al.*, *J.C.S.*, 1958, 1525, (*synth, derivs*)

Hünig, S. *et al.*, *Annalen*, 1976, 1090, (*uv*)

Bonjouklian, R. *et al.*, *Tetrahedron*, 1991, **47**, 7739, (*Tjipanazoles*)