



Percentage Composition: C 48.11%; H 3.80%; N 6.60%; O 33.93%; S 7.56%

Melting Point: Mp 235-236°

>>**Derivative:** 1-Me

Synonym(s): 1-Methylpseudouridine. Antibiotic U 50228. U 50228

CAS Registry Number: 13860-38-3

Molecular Formula: C₁₀H₁₄N₂O₆

Molecular Weight: 258.23

Accurate Mass: 258.085188

Percentage Composition: C 46.51%; H 5.46%; N 10.85%; O 37.17%

Biological Source: Prod. by *Streptomyces platensis* var. *clarensis*, also found in archaeobacterial tRNA

Biological Use/Importance: Shows weak antiviral props.

Physical Description: Needles (EtOH)

Melting Point: Mp 185-186°. Mp 181-184°

Optical Rotation: [α]_D -25 (c, 1 in EtOH aq.). [α]_D²⁵ -6.75 (c, 1.0 in H₂O)

Solubility: BERDY SOL: Sol. H₂O, MeOH, EtOH; fairly sol. Me₂CO; poorly sol. hexane

UV: [acid] $\lambda_{\max}$ 209 (sh) (ϵ 10300); 270 (ϵ 8920) (H₂O at pH 1) (Derep) [base] $\lambda_{\max}$ 267 (ϵ 6190) (H₂O at pH 11) (Derep) [neutral] $\lambda_{\max}$ 209 (ϵ 7550); 270 (ϵ 9080) (H₂O) (Derep) [neutral] $\lambda_{\max}$ 209 (ϵ 7546); 270 (ϵ 9081) (H₂O) (Berdy) [acid] $\lambda_{\max}$ 270 (ϵ 8923) (pH 1 buffer) (Berdy) [base] $\lambda_{\max}$ 267 (ϵ 6192) (pH 11 buffer) (Berdy)

>>**Derivative:** 3-Me

Synonym(s): 3-Methylpseudouridine. 3-Methyl- ψ -uridine

CAS Registry Number: 81691-06-7

Molecular Formula: C₁₀H₁₄N₂O₆

Molecular Weight: 258.23

Accurate Mass: 258.085188

Percentage Composition: C 46.51%; H 5.46%; N 10.85%; O 37.17%

Biological Source: Prod. by *Nocardia lactamdurans*

Melting Point: Mp 148-149°

Solubility: BERDY SOL: Sol. H₂O

UV: [base] $\lambda_{\max}$ 285 (ϵ) (H₂O at pH 12) (Derep) [neutral] $\lambda_{\max}$ 263 (ϵ) (pH 7 H₂O) (Derep) [neutral] $\lambda_{\max}$ 263 (ϵ 10000) (pH 7 buffer) (Berdy) [acid] $\lambda_{\max}$ 253 (ϵ 11500) (pH 1 buffer) (Berdy)

>>**Derivative:** 3-Me, 2'-deoxy

Synonym(s): 2'-Deoxy-3-methylpseudouridine C

CAS Registry Number: 81691-10-3

Molecular Formula: C₁₀H₁₄N₂O₅

Molecular Weight: 242.231

Accurate Mass: 242.090273

Percentage Composition: C 49.58%; H 5.83%; N 11.56%; O 33.03%

Physical Description: Cryst. (EtOH/Et₂O)

Melting Point: Mp 175°

>>**Derivative:** 1,3-Di-Me

CAS Registry Number: 64272-68-0

Molecular Formula: C₁₁H₁₆N₂O₆

Molecular Weight: 272.257

Accurate Mass: 272.100838

Percentage Composition: C 48.53%; H 5.92%; N 10.29%; O 35.26%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 174°