



>>Derivative: 2'-Me

>>Derivative: 2-*N*-Me

Synonym(s): *N*-Methylguanosine, 9Cl

CAS Registry Number: 2140-77-4

Molecular Formula: C₁₁H₁₅N₅O₅

Molecular Weight: 297.27

Accurate Mass: 297.10732

Percentage Composition: C 44.44%; H 5.09%; N 23.56%; O 26.91%

Biological Source: Isol. from *Triticum* sp.

Physical Description: Cryst. +1H₂O (H₂O)

Melting Point: Mp 200 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{20}$ -34.6 (c, 1.01 in DMSO/EtOH 1:1)

Other Data: Softens *ca.* 179°, gradual dec. to *ca.* 230°

Sigma: M4004

>>Derivative: *N*²,*N*²-Di-Me

Synonym(s): *N,N*-Dimethylguanosine, 9Cl

CAS Registry Number: 2140-67-2

Molecular Formula: C₁₂H₁₇N₅O₅

Molecular Weight: 311.297

Accurate Mass: 311.12297

Percentage Composition: C 46.30%; H 5.50%; N 22.50%; O 25.70%

Biological Source: Isol. from *Triticum* sp.

Physical Description: Needles (H₂O)

Melting Point: Mp 242 dec.° (238-239°)

Optical Rotation: $[\alpha]_{\text{D}}^{26}$ -35.6 (c, 1.07 in DMSO/EtOH 1:1)

Solubility: BERDY SOL: Sol. H₂O

UV: [neutral] λ_{max} 265 () (pH 7 buffer) (Berdy) [acid] λ_{max} 258 (ϵ 7500) (HCl) (Berdy) [base] λ_{max} 263 () (NaOH) (Berdy)

Other Data: λ_{max} 265nm (H₂O, pH 1)

Sigma: D1056

>>Derivative: 1-Amino

Synonym(s): 1-Aminoguanosine

CAS Registry Number: 19029-68-6

Molecular Formula: C₁₀H₁₄N₆O₅

Molecular Weight: 298.258

Accurate Mass: 298.102569

Percentage Composition: C 40.27%; H 4.73%; N 28.18%; O 26.82%

Melting Point: Mp 270 dec.°

Other Data: λ_{max} 256 (ϵ 16400), 270 (MeOH); 257 (11600), 278 (pH 1); 255 nm (14300) (pH 11)

>>Derivative: 3'-*O*-(4-Acetyl- α -L-fucopyranoside), 2',5'-di-*O*-sulfate

Synonym(s): 3'-*O*-(4-Acetyl- α -L-fucopyranosyl)guanosine 2',5'-disulfate. **HF 7**

CAS Registry Number: 158118-41-3

Molecular Formula: C₁₈H₂₅N₅O₁₆S₂

Molecular Weight: 631.551

Accurate Mass: 631.073775

Percentage Composition: C 34.23%; H 3.99%; N 11.09%; O 40.53%; S 10.15%

Biological Source: Isol. from the funnel-web spider *Hololena curta*

Biological Use/Importance: Neuroactive agent

References: