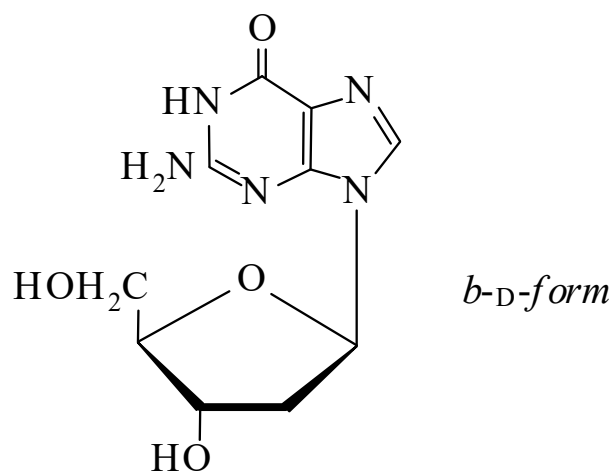




>>Entry Name: 2'-Deoxyribofuranosylguanine

Synonym(s): 2-Amino-9-(2-deoxy-*erythro*-pentofuranosyl)-6-purinone



Related CAS Registry Numbers(s): 102783-74-4

Molecular Formula: C₁₀H₁₃N₅O₄

Molecular Weight: 267.244

Accurate Mass: 267.096755

Percentage Composition: C 44.94%; H 4.90%; N 26.21%; O 23.95%

>>Variant: α-D-form

Molecular Formula: C₁₀H₁₃N₅O₄

Molecular Weight: 267.244

Accurate Mass: 267.096755

Percentage Composition: C 44.94%; H 4.90%; N 26.21%; O 23.95%

Physical Description: Hemihydrate

Optical Rotation: [α]_D²⁶+102.4 (c, 0.99 in DMF)

Other Data: λ_{max} 274 (ε 7 710), 254.5 (10 700) (pH 1); 259-267 broad nm (9 960) (pH 11)

>>Variant: β-D-form

Synonym(s): 2'-Deoxyguanosine. Guanine deoxyriboside

CAS Registry Number: 961-07-9

Molecular Formula: C₁₀H₁₃N₅O₄

Molecular Weight: 267.244

Accurate Mass: 267.096755

Percentage Composition: C 44.94%; H 4.90%; N 26.21%; O 23.95%

Biological Source: Component of all deoxyribonucleic acids. Isol. from plants, eg. *Phaseolus vulgaris*

Physical Description: Cryst. + 1H₂O

Melting Point: Mp 300° (also said to be indefinite)

Optical Rotation: [α]_D²⁶-20.3 (c, 1.2 in DMF). [α]_D¹⁹-47.7 (0.1M NaOH). [α]_D²⁴-30.2 (H₂O)

UV: [acid] λ_{max} 254 (ε 10700); 274 (ε 7710) (HCl) (Berdy) [base] λ_{max} 259 (ε 9960) (NaOH) (Berdy)

Other Data: λ_{max} 252 (ε 13 700) (pH 7); 255 (12 100), 272 sh (8 460) (pH 1); 258-66 nm (12 000) (pH 11) (H₂O)

Fluka: 31070

Sigma: D0901

>>Derivative: 3'-Ac

CAS Registry Number: 51549-58-7

Molecular Formula: C₁₂H₁₅N₅O₅

Molecular Weight: 309.281

Accurate Mass: 309.10732

Percentage Composition: C 46.60%; H 4.89%; N 22.64%; O 25.87%

Melting Point: Mp 240 dec.°

Optical Rotation: [α]_D¹⁹-12.5 (10% EtOH aq.)