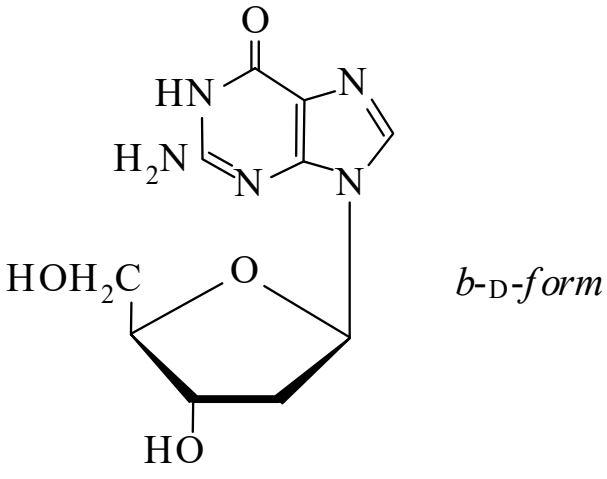
>>**Entry Name: 2'-Deoxyribofuranosylguanine**
Synonym(s): 2-Amino-9-(2-deoxy-*erythro*-pentofuranosyl)-6-purinone



b-D-*form*

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

Molecular Formula: $C_{10}H_{13}N_5O_4$
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: $C_{10}H_{13}N_5O_4$
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: $[\alpha]_D^{26}$+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: $C_{10}H_{13}N_5O_4$
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. + $1H_2O$
Melting Point: Mp 300° (also said to be indefinite)
Optical Rotation: $[\alpha]_D^{26}$–20.3 (c, 1.2 in DMF). $[\alpha]_D^{19}$–47.7 (0.1*M* NaOH). $[\alpha]_D^{24}$–30.2 (H_2O)
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) (H_2O)

Fluka: 31070

Sigma: D0901

>>**Derivative:** 3'-Ac

CAS Registry Number: 51549-58-7

Molecular Formula: $C_{12}H_{15}N_5O_5$
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: $[\alpha]_D^{19}$ –12.5 (10% EtOH aq.)