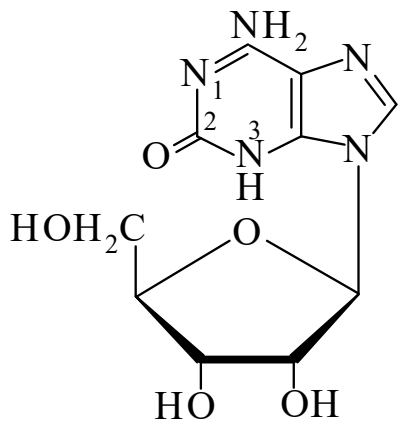
>>**Entry Name: Isoguanosine**

Synonym(s): 6-Amino-9-β-D-ribofuranosyl-9*H*-purin-2(1*H*)-one, 8Cl. 9-β-D-Ribofuranosylisoguanine. Crotonoside. 2-Hydroxyadenosine



CAS Registry Number: 1818-71-9

Molecular Formula: $C_{10}H_{13}N_5O_5$
Molecular Weight: 283.243
Accurate Mass: 283.09167
Percentage Composition: C 42.41%; H 4.63%; N 24.73%; O 28.24%
Use/Importance: Incorporated into mammalian nucleic acids. Stimulates cyclic AMP incorporation into brain tissue, inhibitor of inosine monophosphate pyrophosphonylase and glutamic acid dehydrogenase
Physical Description: Cryst. (H_2O)
Melting Point: Mp 243-245 (237-252°) dec.°
Optical Rotation: $[\alpha]_D^{26}$–71 (c, 1.1 in 0.1*M* NaOH)
Solubility: BERDY SOL: Sol. H_2O
UV: [acid] λ_{max} 235 (ε 6140); 283 (ε 12700) (0.05*N* HCl) (Derep) [base] λ_{max} 251 (ε 6890); 285 (ε 10600) (0.05*N* NaOH) (Derep) [neutral] λ_{max} 247 (ε 8930); 293 (ε 11100) (H_2O) (Derep)
Other Data: λ_{max} 293 (ε 11 100), 247 (8 930) (H_2O); 283 (12 700), 235 (6 140) (0.5*M* HCl); 285 (10 550), 251 nm (6 890) (0.05*M* NaOH)

>>**Derivative:** 6*N*-Me

CAS Registry Number: 23605-76-7

Molecular Formula: $C_{11}H_{15}N_5O_5$
Molecular Weight: 297.27
Accurate Mass: 297.10732
Percentage Composition: C 44.44%; H 5.09%; N 23.56%; O 26.91%
Melting Point: Mp 188-190 dec.°
Optical Rotation: $[\alpha]_D^{26}$–63.1 (c, 0.9 in 0.1*M* NaOH)

>>**Derivative:** 6*N*-Et

Molecular Formula: $C_{12}H_{17}N_5O_5$
Molecular Weight: 311.297
Accurate Mass: 311.12297
Percentage Composition: C 46.30%; H 5.50%; N 22.50%; O 25.70%
Melting Point: Mp 212 dec.°
Optical Rotation: $[\alpha]_D^{26}$–68.2 (c, 0.97 in 0.1*M* NaOH)

>>**Derivative:** 6*N*-Di-Me

CAS Registry Number: 24386-79-6

Molecular Formula: $C_{12}H_{17}N_5O_5$
Molecular Weight: 311.297
Accurate Mass: 311.12297
Percentage Composition: C 46.30%; H 5.50%; N 22.50%; O 25.70%
Melting Point: Mp 184-186 (220°) dec.°
Optical Rotation: $[\alpha]_D^{26}$–52 (c, 0.07 in 0.1*M* NaOH)

>>**Derivative:** 1-Me