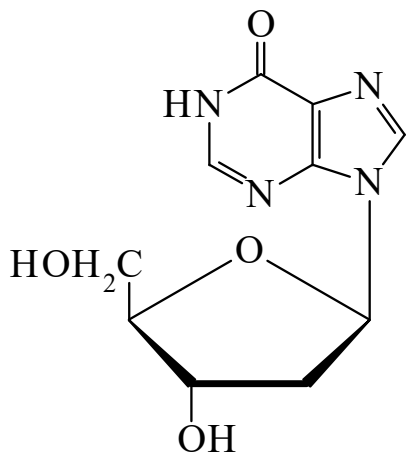
>>**Entry Name: 2'-Deoxyinosine**
ENTRY UNDER REVIEW
Synonym(s): 9-(2-Deoxyribofuranosyl)hypoxanthine. Hypoxanthine 2-deoxyriboside



CAS Registry Number: 29868-32-4
Extra CAS Registry Numbers(s): 890-38-0

Molecular Formula: $C_{10}H_{12}N_4O_4$
Molecular Weight: 252.229
Accurate Mass: 252.085856
Percentage Composition: C 47.62%; H 4.80%; N 22.21%; O 25.37%
Biological Source: Isol. from herring sperm DNA, from *Phaseolus vulgaris, Laminaria saccharina, Furcellaria fastigiata, Lactobacillus* spp. etc.
Use/Importance: Ambiguous nucleoside forming base pairs with all four conventional nucleosides
Physical Description: Needles (MeOH), cryst. (H_2O)
Melting Point: Mp 218 dec.°
Optical Rotation: $[\alpha]_D^{27}$+7.92 (c, 0.53 in 0.1*M* NaOH). $[\alpha]_D^{30}$–21 (c, 1 in H_2O)

>>**Derivative:** Oxime

CAS Registry Number: 51385-49-0
Melting Point: Mp 139-140°
Optical Rotation: $[\alpha]_D$ –21.8 (c, 1 in MeOH)
Other Data: Softens at 110-115° and 130-135°

References:

Brown, D.M. *et al.*, *J.C.S.*, 1950, 1990, *(struct)*
Manson, L.A. *et al.*, *J. Biol. Chem.*, 1951, **191**, 87, *(isol)*
Banhidi, Z.G. *et al.*, *Acta Chem. Scand.*, 1953, **7**, 713, *(isol)*
Venner, H*., Chem. Ber.*, 1960, **93**, 140, *(synth)*
Robins, M.J. *et al.*, *J.A.C.S.*, 1965, **87**, 4934, *(pmr)*
Rousseau, R.J. *et al.*, *J. Het. Chem.*, 1970, **7**, 367, *(synth, uv)*
Robins, M.J. *et al.*, *Can. J. Chem.*, 1973, **51**, 3161, *(synth)*
Yamazaki, A. *et al.*, *Chem. Pharm. Bull.*, 1973, **21**, 1143, *(synth)*
Mengel, R. *et al.*, *Annalen*, 1977, 1585, *(synth)*