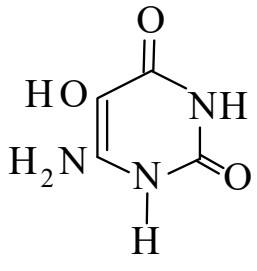
>>**Entry Name: 4-Amino-2,5,6-trihydroxypyrimidine**
ENTRY UNDER REVIEW
Synonym(s): 6-Amino-5-hydroxy-2,4(1*H*,3*H*)-pyrimidinedione. 6-Amino-2,4,5-pyrimidinetriol. Isouramil. 6-Aminobarbituric acid



CAS Registry Number: 3914-34-9

Molecular Formula: $C_4H_5N_3O_3$
Molecular Weight: 143.102
Accurate Mass: 143.033092
Percentage Composition: C 33.57%; H 3.52%; N 29.36%; O 33.54%
General Statement: Di-NH-form predominates
Melting Point: Mp 290°

>>**Derivative:** 5-*O*-β-D-Glucopyranoside
Synonym(s): Convicine

CAS Registry Number: 19286-37-4

Molecular Formula: $C_{10}H_{15}N_3O_8$
Molecular Weight: 305.244
Accurate Mass: 305.085917
Percentage Composition: C 39.35%; H 4.95%; N 13.77%; O 41.93%
Biological Source: Isol. from the seeds of *Vicia faba* and *Vicia sativa*
Melting Point: Mp 287 dec.°
UV: [neutral] λ_{max} 271 () (H_2O, pH 7) [acid] λ_{max} 220 (); 271 () (H_2O, pH 1) [base] λ_{max} 273 () (H_2O, pH 13)

>>**Derivative:** 4-*N*-Ac

Molecular Formula: $C_6H_7N_3O_4$
Molecular Weight: 185.139
Accurate Mass: 185.043657
Percentage Composition: C 38.93%; H 3.81%; N 22.70%; O 34.57%
Physical Description: Cryst. (EtOH)
Melting Point: Mp 300°

>>**Derivative:** 5-*O*-Ac

Molecular Formula: $C_6H_7N_3O_4$
Molecular Weight: 185.139
Accurate Mass: 185.043657
Percentage Composition: C 38.93%; H 3.81%; N 22.70%; O 34.57%
Physical Description: Cryst. (H_2O)
Melting Point: Mp 295°

>>**Derivative:** 4,5-*N,O*-Di-Ac

Molecular Formula: $C_8H_9N_3O_5$
Molecular Weight: 227.176
Accurate Mass: 227.054222
Percentage Composition: C 42.30%; H 3.99%; N 18.50%; O 35.21%
Physical Description: Cryst. (H_2O)
Melting Point: Mp 300°

References:

Davoll, J. *et al.*, *J.C.S.*, 1956, 2124
Bien, S. *et al.*, *J.C.S.(C)*, 1968, 496
Brown, E.G. *et al.*, *Phytochemistry*, 1972, **11**, 3203, *(Convicine, isol)*
Bien, S. *et al.*, *J.C.S. Perkin 1*, 1973, 1089, *(Convicine, synth)*