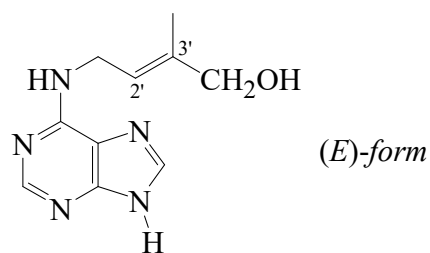




>>Entry Name: Zeatin

ENTRY UNDER REVIEW

Synonym(s): 2-Methyl-4-(1*H*-purin-6-ylamino)-2-buten-1-ol, 9Cl. 6-(4-Hydroxy-3-methyl-2-butenylamino)purine. *N*⁶-(ω-Hydroxyisopentenyl)adenine



CAS Registry Number: 13114-27-7

Molecular Formula: C₁₀H₁₃N₅O

Molecular Weight: 219.246

Accurate Mass: 219.11201

Percentage Composition: C 54.78%; H 5.98%; N 31.94%; O 7.30%

UV: [acid] λ_{max} 275 (ε 17400) (pH 1 H₂O) (Derep) [base] λ_{max} 275 (ε 18200) (pH 13 H₂O) (Derep) [neutral] λ_{max} 270 (ε 18500) (95% EtOH) (Derep)

Sigma: Z4625

>>Variant: (E)-form

CAS Registry Number: 1637-39-4

Molecular Formula: C₁₀H₁₃N₅O

Molecular Weight: 219.246

Accurate Mass: 219.11201

Percentage Composition: C 54.78%; H 5.98%; N 31.94%; O 7.30%

Biological Source: Isol. from *Zea mays* (Gramineae) and very many other plants

Biological Use/Importance: Induces cell division; most effective of all known natural cytokinins

Melting Point: Mp 212-213° (207-208°)

Solubility: Sol. H₂O

UV: [neutral] λ_{max} 212 (ε 17050); 270 (ε 16150) (H₂O) (Berdy) [acid] λ_{max} 207 (ε 14500); 275 (ε 14650) (HCl) (Berdy) [base] λ_{max} 220 (ε 15900); 276 (ε 14650) (NaOH) (Berdy)

Fluka: 96088

Sigma: Z0500

>>Derivative: Picrate

Melting Point: Mp 180-190°

>>Derivative: O-β-D-Glucopyranoside

CAS Registry Number: 56329-06-7

Molecular Formula: C₁₆H₂₃N₅O₆

Molecular Weight: 381.388

Accurate Mass: 381.164835

Percentage Composition: C 50.39%; H 6.08%; N 18.36%; O 25.17%

Biological Source: Isol. from *Lupinus angustifolius* and other plants

Physical Description: Cryst. (1-butanol)

Melting Point: Mp 124-128°

>>Derivative: O-Ac

Melting Point: Mp 168-169°