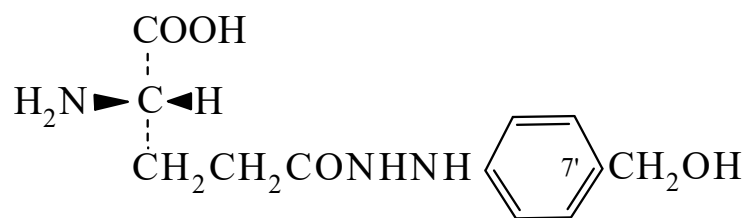




>>Entry Name: Agaritine

Synonym(s): β -*N*-(γ -Glutamyl)-4-hydroxymethylphenylhydrazine. Glutamic acid 5-2-(α -hydroxy-*p*-tolyl)hydrazide, 8Cl



CAS Registry Number: 2757-90-6

Molecular Formula: C₁₂H₁₇N₃O₄

Molecular Weight: 267.284

Accurate Mass: 267.121907

Percentage Composition: C 53.92%; H 6.41%; N 15.72%; O 23.94%

>>Variant: (S)-form

Synonym(s): L-form

Molecular Formula: C₁₂H₁₇N₃O₄

Molecular Weight: 267.284

Accurate Mass: 267.121907

Percentage Composition: C 53.92%; H 6.41%; N 15.72%; O 23.94%

Biological Source: Constit. of some members of the family Agaricaceae, notably *Agaricus bisporus*

Biological Use/Importance: Prevention of melanin formation. Tyrosinase inhibitor

Physical Description: Cryst. (EtOH/butanol)

Melting Point: Mp 205-209 dec.°

Optical Rotation: $[\alpha]_D^{25} +7$ (c, 0.8 in H₂O)

Solubility: BERDY SOL: Sol. MeOH, H₂O; poorly sol. EtOAc, hexane

pKa Value: pK_{a1} 3.4; pK_{a2} 8.86 (H₂O)

UV: [neutral] $\lambda_{\max}$ 237 (ϵ 12000); 280 (ϵ 1400) (H₂O) (Berdy)

Hazard & Toxicity: A procarcinogen

>>Derivative: 7'-Aldehyde

Synonym(s): *N*²-(γ -Glutamyl)-4-formylphenylhydrazine. **Agaritinal**

CAS Registry Number: 114847-20-0

Molecular Formula: C₁₂H₁₅N₃O₄

Molecular Weight: 265.268

Accurate Mass: 265.106257

Percentage Composition: C 54.33%; H 5.70%; N 15.84%; O 24.13%

Biological Source: Isol. from *Agaricus campestris*

Solubility: BERDY SOL: Sol. H₂O, MeOH

UV: [neutral] $\lambda_{\max}$ 248 (ϵ 5750); 385 (ϵ 20000) (MeOH) (Berdy) [neutral] $\lambda_{\max}$ 231 (ϵ 6200); 313 (ϵ 15500) (H₂O) (Berdy) [acid] $\lambda_{\max}$ 231 (ϵ 6200); 313 (ϵ 15500) (HCl) (Berdy)

>>Derivative: 7'-Carboxylic acid

Synonym(s): *N*²-(γ -Glutamyl)-4-carboxyphenylhydrazine

CAS Registry Number: 69644-85-5

Molecular Formula: C₁₂H₁₅N₃O₅

Molecular Weight: 281.268

Accurate Mass: 281.101172

Percentage Composition: C 51.24%; H 5.38%; N 14.94%; O 28.44%

Biological Source: Isol. from *Agaricus bisporus*

Melting Point: Mp 175°

Other Data: Isomer of Anthglutin [CLJ97-T](#)

References: