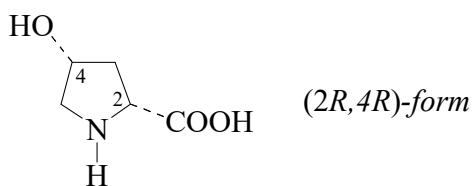




>>Entry Name: 4-Hydroxy-2-pyrrolidinecarboxylic acid

ENTRY UNDER REVIEW

Synonym(s): 4-Hydroxyproline. Oxyproline



Related CAS Registry Numbers(s): 67463-44-9 89771-43-7

Molecular Formula: C₅H₉NO₃

Molecular Weight: 131.131

Accurate Mass: 131.058244

Percentage Composition: C 45.80%; H 6.92%; N 10.68%; O 36.60%

>>Variant: (2R,4R)-form

Synonym(s): D-*allo*-form. D-*cis*-form

CAS Registry Number: 2584-71-6

Molecular Formula: C₅H₉NO₃

Molecular Weight: 131.131

Accurate Mass: 131.058244

Percentage Composition: C 45.80%; H 6.92%; N 10.68%; O 36.60%

Melting Point: Mp 237-241°

Optical Rotation: $[\alpha]_{\text{D}}^{18} +58.6$

Other Data: Insipid taste

Aldrich: 21994-0

Fluka: 56246

Sigma: H5877

>>Variant: (2R,4S)-form

Synonym(s): D-*trans*-form

CAS Registry Number: 3398-22-9

Molecular Formula: C₅H₉NO₃

Molecular Weight: 131.131

Accurate Mass: 131.058244

Percentage Composition: C 45.80%; H 6.92%; N 10.68%; O 36.60%

Melting Point: Mp 274°

Optical Rotation: $[\alpha]_{\text{D}}^{21} +75.2$ (H₂O)

Other Data: Insipid taste

>>Variant: (2S,4R)-form

Synonym(s): L-*trans*-form

CAS Registry Number: 51-35-4

Molecular Formula: C₅H₉NO₃

Molecular Weight: 131.131

Accurate Mass: 131.058244

Percentage Composition: C 45.80%; H 6.92%; N 10.68%; O 36.60%

Biological Source: Constit. of proteins

Use/Importance: Chiral building block

Melting Point: Mp 274°

Optical Rotation: $[\alpha]_{\text{D}}^{26} -74.6$

pKa Value: pK_{a2} 9.73 (25°)

Other Data: Sweet taste

Aldrich: H5440-9

Fluka: 56250

Sigma: H9261