



>>Entry Name: **2,5-Dihydro-1*H*-pyrrole-2-carboxylic acid**, 9CI

Synonym(s): 3-Pyrroline-2-carboxylic acid, 8CI. 3,4-Dehydroproline. 3,4-Dehydropyrrolidine-2-carboxylic acid. 3,4-Didehydroproline



CAS Registry Number: 3220-74-4

Molecular Formula: C₅H₇NO₂

Molecular Weight: 113.116

Accurate Mass: 113.047679

Percentage Composition: C 53.09%; H 6.24%; N 12.38%; O 28.29%

>>Variant: (*R*)-form

Synonym(s): D-form

CAS Registry Number: 58640-72-5

Molecular Formula: C₅H₇NO₂

Molecular Weight: 113.116

Accurate Mass: 113.047679

Percentage Composition: C 53.09%; H 6.24%; N 12.38%; O 28.29%

>>Derivative: Amide

CAS Registry Number: 103305-53-9

Molecular Formula: C₅H₈N₂O

Molecular Weight: 112.131

Accurate Mass: 112.063663

Percentage Composition: C 53.56%; H 7.19%; N 24.98%; O 14.27%

Optical Rotation: $[\alpha]_{\text{D}}^{20} +320$

>>Derivative: Amide; hydrochloride

CAS Registry Number: 65556-28-7

Optical Rotation: $[\alpha]_{\text{D}}^{20} +59$ (c, 2 in EtOH)

>>Variant: (*S*)-form

Synonym(s): L-form

CAS Registry Number: 4043-88-3

Molecular Formula: C₅H₇NO₂

Molecular Weight: 113.116

Accurate Mass: 113.047679

Percentage Composition: C 53.09%; H 6.24%; N 12.38%; O 28.29%

Use/Importance: Inhibitor of collagen synthesis

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 236-237°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -375$ (c, 2 in H₂O)

Aldrich: 86230-4

Fluka: 30890

Sigma: D4893

>>Derivative: *N*-Benzyloxycarbonyl, Me ester

CAS Registry Number: 5211-24-5

Molecular Formula: C₁₄H₁₅NO₄

Molecular Weight: 261.277

Accurate Mass: 261.100109

Percentage Composition: C 64.36%; H 5.79%; N 5.36%; O 24.49%

Physical Description: Oil

Optical Rotation: $[\alpha]_{\text{D}}^{20} -210.5$ (c, 1.7 in CHCl₃) (−189.6)