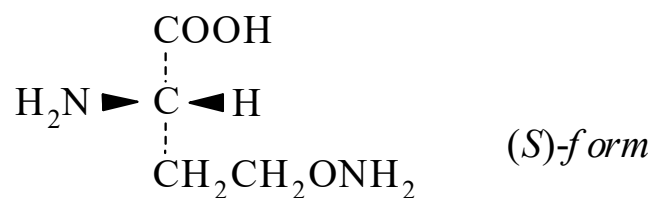




>>Entry Name: 2-Amino-4-(aminooxy)butanoic acid, 8Cl

ENTRY UNDER REVIEW

Synonym(s): *O*-Aminohomoserine, 9Cl. Canaline



Molecular Formula: C₄H₁₀N₂O₃

Molecular Weight: 134.135

Accurate Mass: 134.069143

Percentage Composition: C 35.82%; H 7.51%; N 20.88%; O 35.78%

>>Variant: (*S*)-form

Synonym(s): L-form

CAS Registry Number: 496-93-5

Molecular Formula: C₄H₁₀N₂O₃

Molecular Weight: 134.135

Accurate Mass: 134.069143

Percentage Composition: C 35.82%; H 7.51%; N 20.88%; O 35.78%

Biological Source: Present in *Canavalia ensiformis* (Jackbean) and the unripened seeds of *Astragalus sinicus*

Use/Importance: Potent inhibitor of pyridoxal phosphate-containing enzymes

Physical Description: Needles (EtOH)

Melting Point: Mp 214 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{21} -8.31$

Sigma: C4136

>>Derivative: Hydrochloride (1:2)

Physical Description: Cryst. (EtOH)

Melting Point: Mp 166 dec.°

>>Derivative: Picrate

Melting Point: Mp 192-193 dec.°

>>Derivative: Dibenzoyl

Molecular Formula: C₁₈H₁₈N₂O₅

Molecular Weight: 342.351

Accurate Mass: 342.121573

Percentage Composition: C 63.15%; H 5.30%; N 8.18%; O 23.37%

Melting Point: Mp 99 dec.°

>>Variant: (±)-form

CAS Registry Number: 15985-61-2

Molecular Formula: C₄H₁₀N₂O₃

Molecular Weight: 134.135

Accurate Mass: 134.069143

Percentage Composition: C 35.82%; H 7.51%; N 20.88%; O 35.78%

Physical Description: Cryst. (Me₂CO/EtOH/H₂O)

Melting Point: Mp 195 dec.°

pKa Value: p*K*_{a1} 2.4; p*K*_{a2} 3.7; p*K*_{a3} 9.2 (25°)

>>Derivative: Me ester

Molecular Formula: C₅H₁₂N₂O₃

Molecular Weight: 148.161

Accurate Mass: 148.084793

Percentage Composition: C 40.53%; H 8.16%; N 18.91%; O 32.40%

Melting Point: Mp 165 dec.° (as hydrochloride)

References: