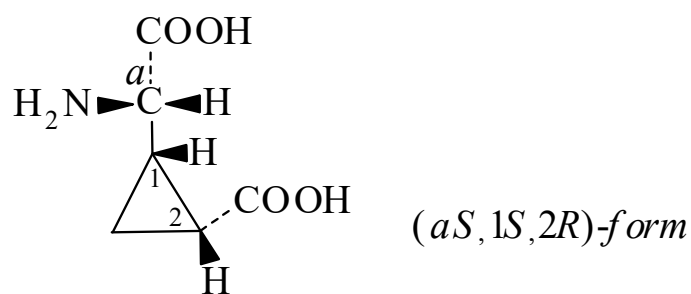




>>Entry Name: α -Amino-2-carboxycyclopropaneacetic acid, 8Cl

Synonym(s): 2-(Carboxycyclopropyl)glycine. 3,4-Methanoglutamic acid



Related CAS Registry Numbers(s): 22255-17-0 22255-18-1

Molecular Formula: $C_6H_9NO_4$

Molecular Weight: 159.141

Accurate Mass: 159.053159

Percentage Composition: C 45.28%; H 5.70%; N 8.80%; O 40.21%

Biological Use/Importance: Metabotropic glutamate receptor agonist

>>Variant: ($\alpha S,1S,2R$)-form

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

CAS Registry Number: 117857-95-1

Molecular Formula: $C_6H_9NO_4$

Molecular Weight: 159.141

Accurate Mass: 159.053159

Percentage Composition: C 45.28%; H 5.70%; N 8.80%; O 40.21%

Biological Source: Isol. from *Aesculus parviflora* seeds, and from *Ephedra altissima* and *Ephedra foeminea*

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

Optical Rotation: $[\alpha]_D^{20} +25$ (c, 1 in H₂O). $[\alpha]_D +58$ (c, 0.5 in 5M HCl)

Sigma: C1585

>>Variant: ($\alpha S,1S,2S$)-form

Synonym(s): L-*trans*-form. L-CCG-I

CAS Registry Number: 117857-93-9

Molecular Formula: $C_6H_9NO_4$

Molecular Weight: 159.141

Accurate Mass: 159.053159

Percentage Composition: C 45.28%; H 5.70%; N 8.80%; O 40.21%

Biological Source: Isol. from seeds of *Blighia sapida* and from *Ephedra altissima*

Physical Description: Cryst.

Optical Rotation: $[\alpha]_D^{20} +107$ (c, 2 in H₂O). $[\alpha]_D +146$ (c, 1 in 5M HCl)

Other Data: Pharmacol. active isomer

Sigma: C1710

>>Variant: ($\alpha S,1R,2S$)-form

CAS Registry Number: 117857-96-2

Molecular Formula: $C_6H_9NO_4$

Molecular Weight: 159.141

Accurate Mass: 159.053159

Percentage Composition: C 45.28%; H 5.70%; N 8.80%; O 40.21%

Biological Source: Constit. of *Ephedra altissima* and *Ephedra foeminea*

References:

Fowden, L. *et al.*, *Phytochemistry*, 1969, **8**, 437, (*isol, struct, pmr, ms, cryst struct*)

Fowden, L. *et al.*, *J.C.S.(C)*, 1971, 833, (*cd, ord*)

Kurokawa, N. *et al.*, *Tet. Lett.*, 1985, **26**, 83, (*synth, pmr*)

Yamanoi, K. *et al.*, *Tet. Lett.*, 1988, **29**, 1181, (*synth, biochem*)

Stammer, H., *Tetrahedron*, 1990, **46**, 2231, (*rev*)

Starratt, A.N. *et al.*, *Phytochemistry*, 1995, **40**, 479, (*isol, bibl*)

Sagnard, I. *et al.*, *Tet. Lett.*, 1995, **36**, 3149, (*synth*)