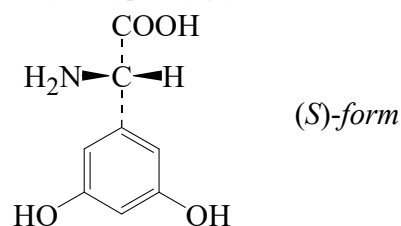




>>Entry Name: 2-Amino-2-(3,5-dihydroxyphenyl)acetic acid

Synonym(s): α -Amino-3,5-dihydroxybenzeneacetic acid, 9Cl. 3,5-Dihydroxyphenylglycine. DHPG



CAS Registry Number: 146255-66-5

Related CAS Registry Numbers(s): 19641-83-9

Molecular Formula: $C_8H_9NO_4$

Molecular Weight: 183.163

Accurate Mass: 183.053159

Percentage Composition: C 52.46%; H 4.95%; N 7.65%; O 34.94%

Source/Synthesis: Isol. from *Euphorbia helioscopia*

Biological Use/Importance: Metabotropic glutamate mglu₁-receptor agonist

Melting Point: Mp 230-232 dec.°

>>Variant: (R)-form

CAS Registry Number: 117468-89-0

Molecular Formula: $C_8H_9NO_4$

Molecular Weight: 183.163

Accurate Mass: 183.053159

Percentage Composition: C 52.46%; H 4.95%; N 7.65%; O 34.94%

Melting Point: Mp 205-206°

Optical Rotation: $[\alpha]_D^{20} -103$ (c, 0.25 in 1M HCl)

>>Variant: (S)-form

CAS Registry Number: 162870-29-3

Molecular Formula: $C_8H_9NO_4$

Molecular Weight: 183.163

Accurate Mass: 183.053159

Percentage Composition: C 52.46%; H 4.95%; N 7.65%; O 34.94%

Biological Source: Isol. from *Euphorbia helioscopia*

Melting Point: Mp 230-232° (dec.)

Optical Rotation: $[\alpha]_D^{29} +70$ (c, 0.1 in H₂O)

Other Data: Stereochem. of natural product not determined, presumably (S-). Pharmacol. active isomer. Mp > 250°

References:

Müller, P. *et al.*, *Z. Naturforsch., B*, 1968, **23**, 659, (isol, struct)

Ito, I. *et al.*, *NeuroReport*, 1992, **3**, 1013-1016, (pharmacol)

Baker, S.R. *et al.*, *Bioorg. Med. Chem. Lett.*, 1995, **5**, 223-228, (S-form, synth)

O'Leary, D.M. *et al.*, *Neurosci. Lett.*, 1997, **229**, 29-32, (pharmacol)

Garcia, M.J. *et al.*, *Tetrahedron: Asymmetry*, 1997, **8**, 85-92, (R-form, synth)