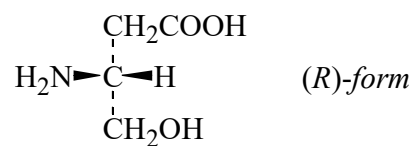




>>Entry Name: 3-Amino-4-hydroxybutanoic acid, 9CI

Synonym(s):  $\gamma$ -Hydroxy- $\beta$ -aminobutyric acid. GOBAB



CAS Registry Number: 589-44-6

Molecular Formula:  $\text{C}_4\text{H}_9\text{NO}_3$

Molecular Weight: 119.12

Accurate Mass: 119.058244

Percentage Composition: C 40.33%; H 7.62%; N 11.76%; O 40.29%

Biological Use/Importance: Antiinflammatory, antifungal and antiseptic agent

>>Variant: (R)-form

CAS Registry Number: 16504-56-6

Molecular Formula:  $\text{C}_4\text{H}_9\text{NO}_3$

Molecular Weight: 119.12

Accurate Mass: 119.058244

Percentage Composition: C 40.33%; H 7.62%; N 11.76%; O 40.29%

>>Derivative: Hydrochloride

CAS Registry Number: 196950-52-4

Melting Point: Mp 177-178°

>>Derivative: Lactone

Synonym(s): 4-Aminodihydro-2(3*H*)-furanone.  $\beta$ -Amino- $\gamma$ -butyrolactone

Melting Point: Mp 175-177° (as hydrochloride)

Optical Rotation:  $[\alpha]_{\text{D}}^{20} +56.7$  (c, 1 in  $\text{H}_2\text{O}$ )

>>Variant: (S)-form

CAS Registry Number: 16504-57-7

Molecular Formula:  $\text{C}_4\text{H}_9\text{NO}_3$

Molecular Weight: 119.12

Accurate Mass: 119.058244

Percentage Composition: C 40.33%; H 7.62%; N 11.76%; O 40.29%

Other Data: Pharmacol. active isomer

>>Derivative: Lactone

Molecular Formula:  $\text{C}_4\text{H}_7\text{NO}_2$

Molecular Weight: 101.105

Percentage Composition: C 47.52%; H 6.98%; N 13.85%; O 31.65%

Melting Point: Mp 198-201° (as hydrobromide)

Optical Rotation:  $[\alpha]_{\text{D}}^{20} -42.6$  (c, 1.08 in  $\text{H}_2\text{O}$ )

>>Derivative: Lactone, *N*-benzoyl

Molecular Formula:  $\text{C}_{11}\text{H}_{11}\text{NO}_3$

Molecular Weight: 205.213

Accurate Mass: 205.073894

Percentage Composition: C 64.38%; H 5.40%; N 6.83%; O 23.39%

Melting Point: Mp 123.5-126°

Optical Rotation:  $[\alpha]_{\text{D}}^{20} -97$  (c, 1.41 in  $\text{CHCl}_3$ )

>>Derivative: Lactone, *N*-*tert*-butyloxycarbonyl

Molecular Formula:  $\text{C}_9\text{H}_{15}\text{NO}_4$

Molecular Weight: 201.222

Accurate Mass: 201.100109

Percentage Composition: C 53.72%; H 7.51%; N 6.96%; O 31.80%

Physical Description: Solid

Melting Point: Mp 113-114° (106-108°)

Optical Rotation:  $[\alpha]$