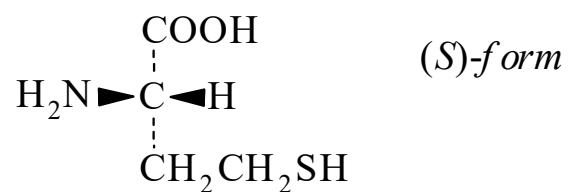




>>Entry Name: 2-Amino-4-mercaptobutanoic acid

Synonym(s): Homocysteine, 9Cl. Hcy



CAS Registry Number: 454-28-4

Molecular Formula: $\text{C}_4\text{H}_9\text{NO}_2\text{S}$

Molecular Weight: 135.187

Accurate Mass: 135.035399

Percentage Composition: C 35.54%; H 6.71%; N 10.36%; O 23.67%; S 23.72%

>>Variant: (R)-form

Synonym(s): D-form

CAS Registry Number: 6027-14-1

Molecular Formula: $\text{C}_4\text{H}_9\text{NO}_2\text{S}$

Molecular Weight: 135.187

Accurate Mass: 135.035399

Percentage Composition: C 35.54%; H 6.71%; N 10.36%; O 23.67%; S 23.72%

Melting Point: Mp 248-250 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{20} -27.2$ (c, 1 in 1M HCl)

Sigma: H3279

>>Derivative: S-Benzyl

Molecular Formula: $\text{C}_{11}\text{H}_{15}\text{NO}_2\text{S}$

Molecular Weight: 225.311

Accurate Mass: 225.082349

Percentage Composition: C 58.64%; H 6.71%; N 6.22%; O 14.20%; S 14.23%

Physical Description: Cryst. (H_2O)

Melting Point: Mp 247-252°

Optical Rotation: $[\alpha]_{\text{D}}^{26} -25$ (1M HCl)

>>Variant: (S)-form

Synonym(s): L-form

CAS Registry Number: 6027-13-0

Molecular Formula: $\text{C}_4\text{H}_9\text{NO}_2\text{S}$

Molecular Weight: 135.187

Accurate Mass: 135.035399

Percentage Composition: C 35.54%; H 6.71%; N 10.36%; O 23.67%; S 23.72%

Biological Source: Component of abnormal human urine

Biological Use/Importance: Intermed. in the metab. conversion of Methionine [HJR27-B](#) to Cysteine [HJQ86-N](#). Has been implicated in the etiology of cardiovascular disease arising from injury to endothelial cells

Melting Point: Mp 247-249 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{20} +27.2$ (c, 1 in 1M HCl)

Sigma: H3404

>>Derivative: S-Me

see Methionine, [HJR27-B](#)

>>Derivative: S-Et

see Ethionine, [CJC20-U](#)