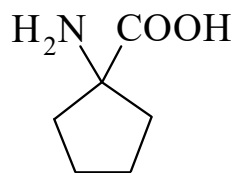




>>Entry Name: 1-Aminocyclopentanecarboxylic acid, 9CI, 8CI

Synonym(s): Cycloleucine. CB 1639. NSC 1026. WR 14997



CAS Registry Number: 52-52-8

Molecular Formula: C₆H₁₁NO₂

Molecular Weight: 129.158

Accurate Mass: 129.078979

Percentage Composition: C 55.80%; H 8.58%; N 10.84%; O 24.77%

Use/Importance: NMDA receptor antagonist. *S*-Adenosylmethionine transferase inhibitor. Causes degeneration of motor nerve terminals. Used as a pharmacol. tool to produce exp. model of subacute degeneration of spinal cord. Antimalarial agent

Physical Description: Prisms

Melting Point: Mp 328-329°

pKa Value: pK_{a1} 2.4; pK_{a2} 10.31 (20°, 0.1M KCl)

Calculated Log P Data: Log P -2.58 (calc)

Hazard & Toxicity: LD₅₀ (rat, orl) 290 mg/kg

Aldrich: A4810-5

Sigma: C6630

>>Derivative: Me ester

Molecular Formula: C₇H₁₃NO₂

Molecular Weight: 143.185

Accurate Mass: 143.094629

Percentage Composition: C 58.72%; H 9.15%; N 9.78%; O 22.35%

Physical Description: Needles (as hydrochloride)

Melting Point: Mp 207-208 dec.° (hydrochloride)

>>Derivative: Et ester

Molecular Formula: C₈H₁₅NO₂

Molecular Weight: 157.212

Accurate Mass: 157.110279

Percentage Composition: C 61.12%; H 9.62%; N 8.91%; O 20.35%

Physical Description: Cryst. (EtOH/Et₂O) (as hydrochloride)

Melting Point: Mp 232° (hydrochloride)

>>Derivative: *N*-Ac

Molecular Formula: C₈H₁₃NO₃

Molecular Weight: 171.196

Accurate Mass: 171.089544

Percentage Composition: C 56.13%; H 7.65%; N 8.18%; O 28.04%

Physical Description: Needles (EtOH/petrol)

Melting Point: Mp 195-197°

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