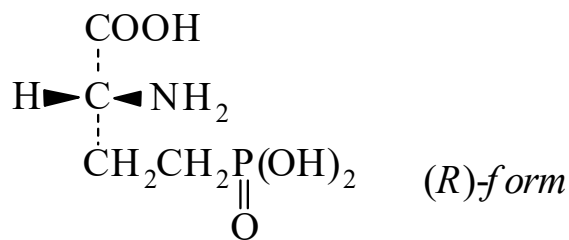




>>Entry Name: 2-Amino-4-phosphonobutanoic acid, 9CI



CAS Registry Number: 6323-99-5

Related CAS Registry Numbers(s): 86879-10-9 145236-29-9

Molecular Formula: C₄H₁₀NO₅P

Molecular Weight: 183.1

Accurate Mass: 183.029661

Percentage Composition: C 26.24%; H 5.50%; N 7.65%; O 43.69%; P 16.92%

Biological Use/Importance: Inhibits glutamine synthetase and glutamate dehydrogenase. Metabotropic glutamate receptor agonist. Shows antiviral activity

>>Variant: (R)-form

Synonym(s): D-form

CAS Registry Number: 78739-01-2

Molecular Formula: C₄H₁₀NO₅P

Molecular Weight: 183.1

Accurate Mass: 183.029661

Percentage Composition: C 26.24%; H 5.50%; N 7.65%; O 43.69%; P 16.92%

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 229-231°

Optical Rotation: $[\alpha]_D^{20} -26.9$

Sigma: A7804

>>Variant: (S)-form

Synonym(s): L-form. L-AP4

CAS Registry Number: 23052-81-5

Molecular Formula: C₄H₁₀NO₅P

Molecular Weight: 183.1

Accurate Mass: 183.029661

Percentage Composition: C 26.24%; H 5.50%; N 7.65%; O 43.69%; P 16.92%

Optical Rotation: $[\alpha]_D^{30} +19.5$ (c, 0.44 in 6M HCl)

Other Data: Pharmacol. active isomer

Sigma: A7929

>>Variant: (±)-form

CAS Registry Number: 20263-07-4

Molecular Formula: C₄H₁₀NO₅P

Molecular Weight: 183.1

Accurate Mass: 183.029661

Percentage Composition: C 26.24%; H 5.50%; N 7.65%; O 43.69%; P 16.92%

Aldrich: 36737-0

Sigma: A1910

>>Derivative: N-Benzoyl

Synonym(s): 2-Benzoylamino-4-phosphonobutanoic acid

Molecular Formula: C₁₁H₁₄NO₆P

Molecular Weight: 287.208

Accurate Mass: 287.055876

Percentage Composition: C 46.00%; H 4.91%; N 4.88%; O 33.42%; P 10.78%

Physical Description: Cryst. (dioxan aq.)

Melting Point: Mp 197°