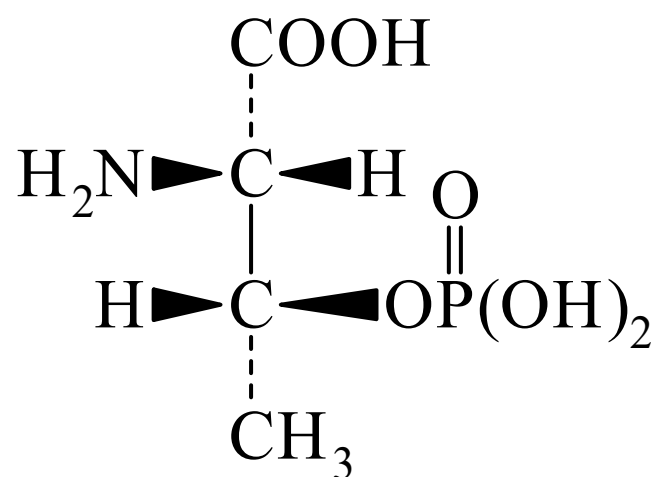




>>Entry Name: 2-Amino-3-phosphonooxybutanoic acid

Synonym(s): Threonine phosphate. Threonine dihydrogen phosphate. *O*-Phosphothreonine



(2*S*,3*R*)-form

Molecular Formula: C₄H₁₀NO₆P

Molecular Weight: 199.1

Accurate Mass: 199.024576

Percentage Composition: C 24.13%; H 5.06%; N 7.04%; O 48.22%; P 15.56%

>>Variant: (2*S*,3*R*)-form

Synonym(s): L-form

CAS Registry Number: 1114-81-4

Molecular Formula: C₄H₁₀NO₆P

Molecular Weight: 199.1

Accurate Mass: 199.024576

Percentage Composition: C 24.13%; H 5.06%; N 7.04%; O 48.22%; P 15.56%

Use/Importance: Formed in many cellular processes. Insol. from casein hydrolysates

Melting Point: Mp 194 dec.°

Optical Rotation: $[\alpha]_{\text{D}}^{24} -7.4$ (c, 2.58 in H₂O)

Fluka: 79717

Sigma: P1053

>>Variant: (2*RS*,3*SR*)-form

CAS Registry Number: 27530-80-9

Molecular Formula: C₄H₁₀NO₆P

Molecular Weight: 199.1

Accurate Mass: 199.024576

Percentage Composition: C 24.13%; H 5.06%; N 7.04%; O 48.22%; P 15.56%

Physical Description: Solid

Melting Point: Mp 194 dec.°. Mp 150-152 dec.°

Sigma: P1003

>>Derivative: *P,P*-Di-Ph ester, *C*-Et ester

Synonym(s): Ethyl 2-amino-3-[(diphenoxyphosphinyl)oxy]butanoate

Molecular Formula: C₁₈H₂₂NO₆P

Molecular Weight: 379.349

Accurate Mass: 379.118476

Percentage Composition: C 56.99%; H 5.85%; N 3.69%; O 25.31%; P 8.16%

Physical Description: Solid (as hydrobromide)

Melting Point: Mp 88-89° (hydrobromide)