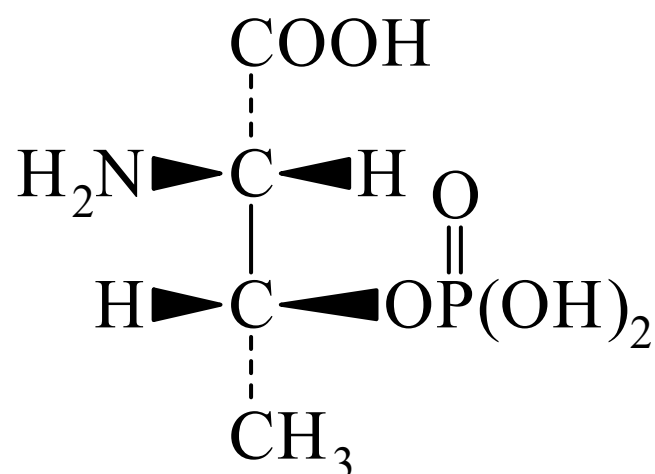




>>Entry Name: 2-Amino-3-phosphonooxybutanoic acid

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



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

**Molecular Formula:** C<sub>4</sub>H<sub>10</sub>NO<sub>6</sub>P

**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:** C<sub>4</sub>H<sub>10</sub>NO<sub>6</sub>P

**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 H<sub>2</sub>O)

**Fluka:** 79717

**Sigma:** P1053

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

**CAS Registry Number:** 27530-80-9

**Molecular Formula:** C<sub>4</sub>H<sub>10</sub>NO<sub>6</sub>P

**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:** C<sub>18</sub>H<sub>22</sub>NO<sub>6</sub>P

**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)