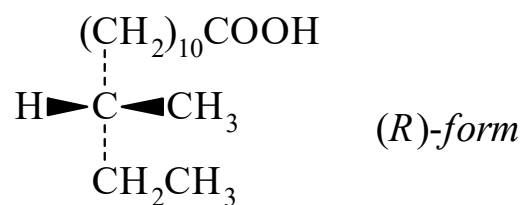




>>Entry Name: 12-Methyltetradecanoic acid

Synonym(s): Anteispentadecanoic acid. **Sarcinic acid**. Aseanostatin P5



CAS Registry Number: 5502-94-3

Related CAS Registry Numbers(s): 135096-46-7

Molecular Formula: C₁₅H₃₀O₂

Molecular Weight: 242.401

Accurate Mass: 242.22458

Percentage Composition: C 74.33%; H 12.47%; O 13.20%

Sigma: M3664

>>Variant: (R)-form

CAS Registry Number: 73711-59-8

Molecular Formula: C₁₅H₃₀O₂

Molecular Weight: 242.401

Accurate Mass: 242.22458

Percentage Composition: C 74.33%; H 12.47%; O 13.20%

Melting Point: Mp 24.2°

Optical Rotation: $[\alpha]_{\text{D}}^{22} -5.8$ (c, 2 in CHCl₃)

>>Derivative: Me ester

CAS Registry Number: 162610-53-9

Molecular Formula: C₁₆H₃₂O₂

Molecular Weight: 256.428

Accurate Mass: 256.24023

Percentage Composition: C 74.94%; H 12.58%; O 12.48%

Boiling Point: Bp₄ 128°

Optical Rotation: $[\alpha]_{\text{D}}^{22} -5.6$ (c, 2 in CHCl₃)

>>Variant: (S)-form

CAS Registry Number: 5746-58-7

Molecular Formula: C₁₅H₃₀O₂

Molecular Weight: 242.401

Accurate Mass: 242.22458

Percentage Composition: C 74.33%; H 12.47%; O 13.20%

Biological Source: Isol. from *Bacillus* sp., *Sarcina* phospholipids and other microbial lipids

Use/Importance: β-Lactamase inhibitor

Physical Description: Liq.

Melting Point: Mp 23.7°

Optical Rotation: $[\alpha]_{\text{D}}^{21} +5.4$ (c, 0.9 in CHCl₃)

>>Derivative: Me ester

CAS Registry Number: 62691-05-8

Boiling Point: Bp₃ 130°

Optical Rotation: $[\alpha]_{\text{D}}^{21} +5.1$ (c, 2 in CHCl₃)

References:

- Akashi, S. *et al.*, *J. Biochem. (Tokyo)*, 1960, **47**, 222, (*isol*)
Song, Y. *et al.*, *J. Antibiot.*, 1981, **34**, 980, (*isol, props, bibl*)
Omura, S. *et al.*, *J. Antibiot.*, 1986, **39**, 1180, (*Aggrecedide A*)
Carballeira, N. *et al.*, *J.O.C.*, 1986, **51**, 2751, (*synth*)
Ishida-Okawara, A. *et al.*, *J. Antibiot.*, 1991, **44**, 524, (*Aseanostatin*)
Kitahara, T. *et al.*, *Biosci., Biotechnol., Biochem.*, 1995, **59**, 78, (*synth, ir, pmr, cmr, abs config*)