CAS Registry Number: 5743-27-1
Optical Rotation: $[\alpha]_D^{10}$+91 (c, 0.3 in H_2O)

>>**Derivative:** Phenylhydrazone

Melting Point: Mp 216°

>>**Derivative:** 6-Hexadecanoyl
Synonym(s): Ascorbyl palmitate, USAN**.** E304

CAS Registry Number: 137-66-6

Molecular Formula: $C_{22}H_{38}O_7$
Molecular Weight: 414.538
Accurate Mass: 414.261755
Percentage Composition: C 63.74%; H 9.24%; O 27.02%
Use/Importance: Antioxidant. Pharmaceutical excipient
Melting Point: Mp 107-117°
Optical Rotation: $[\alpha]_D^{20}$+22.9 (c, 2 in MeOH)

Aldrich: 29112-9
Fluka: 76183
Sigma: A5041

>>**Derivative:** 5,6-*O*-Isopropylidene
Synonym(s): 5,6-*O*-Isopropylidene-L-*threo*-hex-2-enono-1,4-lactone

CAS Registry Number: 15042-01-0

Molecular Formula: $C_9H_{12}O_6$
Molecular Weight: 216.19
Accurate Mass: 216.06339
Percentage Composition: C 50.00%; H 5.59%; O 44.40%
Melting Point: Mp 220-222°
Optical Rotation: $[\alpha]_D^{25}$–25.2 (c, 1.0 in H_2O)
Aldrich: 30136-1
Fluka: 59435
Sigma: I5633

>>**Derivative:** 5,6-*O*-Cyclohexylidene
Synonym(s): 5,6-*O*-Cyclohexylidene-L-*threo*-hex-2-enono-1,4-lactone

CAS Registry Number: 6614-52-4

Molecular Formula: $C_{12}H_{16}O_6$
Molecular Weight: 256.255
Accurate Mass: 256.09469
Percentage Composition: C 56.25%; H 6.29%; O 37.46%
Melting Point: Mp 183-185°
Optical Rotation: $[\alpha]_D^{25}$+12.7 (c, 1.0 in Me_2CO)
Other Data: Props. acc. to Carlsen *et al* (1995), who state that it is obt. as a 1:1 mixt. of diastereoisomers
Aldrich: 37466-0
Fluka: 29397

>>**Derivative:** 5,6-*O*-Benzylidene
Synonym(s): 5,6-*O*-Benzylidene-L-*threo*-hex-2-enono-1,4-lactone

CAS Registry Number: 20664-60-2

Molecular Formula: $C_{13}H_{12}O_6$
Molecular Weight: 264.234
Accurate Mass: 264.06339
Percentage Composition: C 59.09%; H 4.58%; O 36.33%
Physical Description: Cryst. (C_6H_6)
Melting Point: Mp 167-168°