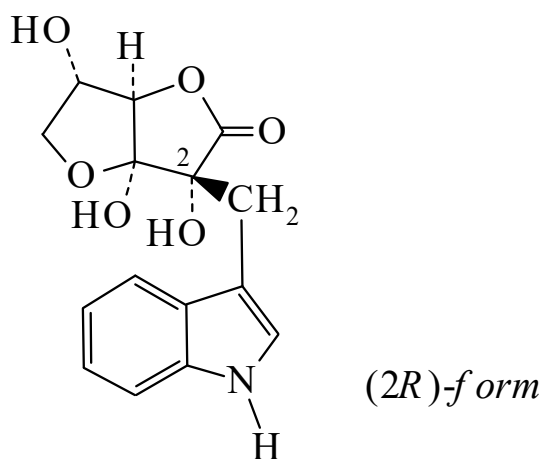




>>Entry Name: Ascorbigen



CAS Registry Number: 8075-98-7

Related CAS Registry Numbers(s): 29400-26-8

Molecular Formula: C₁₅H₁₅NO₆

Molecular Weight: 305.287

Accurate Mass: 305.089939

Percentage Composition: C 59.02%; H 4.95%; N 4.59%; O 31.44%

Source/Synthesis: Present in plants, esp. cabbage and other crucifers

Use/Importance: Bound form of ascorbic acid

>>Variant: (2*R*)-form

Synonym(s): Ascorbigen B. 2-*C*-(1*H*-Indol-3-ylmethyl)-β-*L*-lyxo-3-hexulofuranosonic acid γ-lactone, 9Cl

CAS Registry Number: 26548-49-2

Molecular Formula: C₁₅H₁₅NO₆

Molecular Weight: 305.287

Accurate Mass: 305.089939

Percentage Composition: C 59.02%; H 4.95%; N 4.59%; O 31.44%

Physical Description: Light-yellow amorph. powder

Melting Point: Mp 70° (sinters)

Optical Rotation: [α]_D²⁵+12.5 (c, 1.0 in MeOH)

>>Variant: (2*S*)-form

Synonym(s): Ascorbigen A. 2-*C*-(1*H*-Indol-3-ylmethyl)-β-*L*-xylo-3-hexulofuranosonic acid γ-lactone, 9Cl

CAS Registry Number: 26676-89-1

Molecular Formula: C₁₅H₁₅NO₆

Molecular Weight: 305.287

Accurate Mass: 305.089939

Percentage Composition: C 59.02%; H 4.95%; N 4.59%; O 31.44%

Physical Description: Amorph. powder

Melting Point: Mp *ca.* 65° (sinters)

Optical Rotation: [α]_D²⁵+11 (c, 2.0 in EtOH)

References:

Piironen, E. *et al.*, *Acta Chem. Scand.*, 1962, **16**, 1286, (*synth, bibl*)

Kiss, G. *et al.*, *Helv. Chim. Acta*, 1966, **49**, 989, (*synth, ir, uv, pmr, struct*)

Korolev, A.M. *et al.*, *Bioorg. Khim.*, 1991, **17**, 981