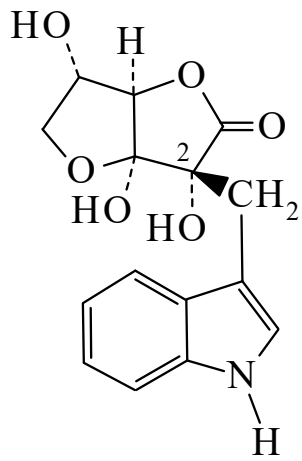
>>**Entry Name: Ascorbigen**



(2*R*)-*form*

CAS Registry Number: 8075-98-7
Related CAS Registry Numbers(s): 29400-26-8

Molecular Formula: $C_{15}H_{15}NO_6$
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, 9CI

CAS Registry Number: 26548-49-2

Molecular Formula: $C_{15}H_{15}NO_6$
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: $[\alpha]_D^{25}$+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, 9CI

CAS Registry Number: 26676-89-1

Molecular Formula: $C_{15}H_{15}NO_6$
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: $[\alpha]_D^{25}$+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