

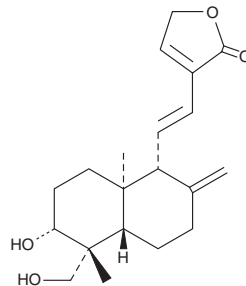
# PRODUCT INFORMATION



## 14-deoxy-11,12-didehydro Andrographolide

Item No. 11670

**CAS Registry No.:** 42895-58-9  
**Formal Name:** 3-[(1E)-2-[(1R,4aS,5R,6R,8aR)-decahydro-6-hydroxy-5-(hydroxymethyl)-5,8a-dimethyl-2-methylene-1-naphthalenyl]ethenyl]-2(5H)-furanone  
**Synonym:** 14-dehydro Andrographolide  
**MF:** C<sub>20</sub>H<sub>28</sub>O<sub>4</sub>  
**FW:** 332.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 247 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

14-deoxy-11,12-didehydro Andrographolide is supplied as a crystalline solid. A stock solution may be made by dissolving the 14-deoxy-11,12-didehydro andrographolide in the solvent of choice. 14-deoxy-11,12-didehydro Andrographolide is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 14-deoxy-11,12-didehydro andrographolide in these solvents is approximately 2 and 10 mg/ml, respectively.

14-deoxy-11,12-didehydro Andrographolide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 14-deoxy-11,12-didehydro andrographolide should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 14-deoxy-11,12-didehydro Andrographolide has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

14-deoxy-11,12-didehydro Andrographolide is an analog of the natural diterpenoid andrographolide (Item No. 11679) that can be isolated from *A. paniculata*.<sup>1</sup> It retains the anti-inflammatory, antiallergenic, immunostimulatory, antiviral, antioxidant, hepatoprotective, and cardiovascular activities of andrographolide without producing cytotoxicity in KB cells (ED<sub>50</sub> >20 µg/ml) that can occur with andrographolide 6.5 µg/ml.<sup>1,2</sup>

### References

1. Li, W., Xu, X., Zhang, H., et al. Secondary metabolites from *Andrographis paniculata*. *Chem. Pharm. Bull. (Tokyo)* **55**(3), 455-458 (2007).
2. Jarukamjorn, K. and Nemoto, N. Pharmacological aspects of *Andrographis paniculata* on health and its major diterpenoid constituent andrographolide. *J. Health Sci.* **54**(4), 370-381 (2008).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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