



LKT Laboratories, Inc.

## Andrographolide

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### Product Information

**Product ID** A5313

**CAS No.** 5508-58-7

**Chemical Name** [1R-[1 $\alpha$ [E(S\*)],4ab,5 $\alpha$ ,6 $\alpha$ ,8 $\alpha$ ]]-3-[2-[Decahydro-6-hydroxy-5-(hydroxymethyl)-5,8a-dimethyl-2-methylene-1-naphthalenyl]ethylidene]dihydro-4-hydroxy-2(3H)-furanone

**Synonym** Andrographis

**Formula** C<sub>20</sub>H<sub>30</sub>O<sub>5</sub>

**Formula Wt.** 350.45

**Melting Point** 218-221 °C

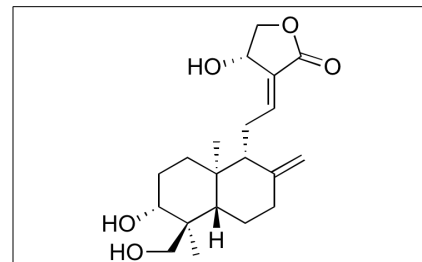
**Purity** ≥98%

**Solubility** Soluble in methanol, acetone, chloroform or ether. Slightly soluble in water.

**Store Temp** -20 °C

**Ship Temp** Ambient

**Description** Andrographolide is a labdane diterpene found in *Andrographis* that exhibits antioxidative, antiviral, anti-inflammatory, anti-diabetic, immunomodulatory, anti-metastatic, and anticancer activities. In vitro, andrographolide decreases TNF- $\alpha$ -induced generation of ROS and expression of ICAM-1 and increases levels of glutathione and heme oxygenase 1 (HO-1). Andrographolide also decreases influenza-induced cell mortality in vitro by inhibiting activation of RIG1-like receptors (RLRs). Additionally, andrographolide suppresses development of diabetes in vivo by decreasing expression of IL-2, IL-17, and IFN- $\gamma$  and increasing expression of IL-10 and TGF- $\beta$ . This compound also decreases production of NO, PGE<sub>2</sub>, iNOS, TNF- $\alpha$ , COX-2, and IFN- $\beta$  in LPS-stimulated macrophages. In leukemia cells, andrographolide inhibits HSP90 activity, decreases Bcr-Abl levels, and induces apoptosis. TEST!!!!!!



### Pricing and Availability

**Bulk quantities available upon request**

Product ID	Size	List Price
A5313	10 mg	\$27.80
A5313	100 mg	\$50.00
A5313	250 mg	\$94.40
A5313	1 g	\$305.10

**References** Lu CY, Yang YC, Li CC, et al. Andrographolide inhibits TNF $\alpha$ -induced ICAM-1 expression via suppression of NADPH oxidase activation and induction of HO-1 and GCLM expression through the PI3K/Akt/Nrf2 and PI3K/Akt/AP-1 pathways in human endothelial cells. *Biochem Pharmacol.* 2014 Sep 1;91(1):40-50. PMID: 24998495.

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**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.