# Data Sheet (Cat.No.TQ0185)



# 14-Deoxy-11,12-didehydroandrographolide

## **Chemical Properties**

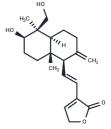
CAS No.: 42895-58-9

Formula: C20H28O4

Molecular Weight: 332.43

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



## **Biological Description**

Description	14-Deoxy-11,12-didehydroandrographolide (AP10) has hypotensive, anti-inflammatanti-asthma, and anti-cancer actions. It can inhibit NF-κB activation.			
Targets(IC50)	NF-ĸB			
In vivo	14-deoxy-11,12-didehydroandrographolide (1 mg/kg) dramatically reduces resistance and restores Cdyn in Ovalbumin-challenged mice in response to methacholine.			
Cell Research	A549 cells ( $3\times10^3$ /well), BEAS-2B cells ( $5\times10^3$ /well), and RBL-2H3 cells ( $3\times10^3$ /well) are seeded in flat-bottomed 96-well plates overnight and then incubated with increasing concentrations ( $3-120~\mu M$ ) of 14-deoxy-11,12-didehydroandrographolide for 24 and 48 h at 37°C. Cell viability is analyzed using the CellTiter 96 AQueous cell proliferation assay. Absorbance is recorded at 490 nm.			
Animal Research	Female BALB/c mice, 6 to 8 weeks old, are sensitized and challenged with OVA. Briefly, mice are sensitized by ip injections of 20 µg of OVA and 4 mg of Al(OH)3 suspended in 0.1 mL of saline on days 0 and 14. On days 22, 23, and 24, mice are challenged with 1% OVA aerosol for 30 min. 14-deoxy-11,12-didehydroandrographolide (0.1, 0.5, and 1 mg/kg) or vehicle (1% DMSO) in 0.1 mL of saline is given by i.p injections 2 h before and 10 h after each OVA aerosol challenge.			

## **Solubility Information**

Solubility	DMF: 100 mg/mL (300.82 mM), Sonication is recommended.
	(< 1 mg/ml refers to the product slightly soluble or insoluble)

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#### **Preparing Stock Solutions**

	1mg	5mg	10mg
1 mM	3.0082 mL	15.0408 mL	30.0815 mL
5 mM	0.6016 mL	3.0082 mL	6.0163 mL
10 mM	0.3008 mL	1.5041 mL	3.0082 mL
50 mM	0.0602 mL	0.3008 mL	0.6016 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

#### Reference

Guan SP, et al. Protective role of 14-deoxy-11,12-didehydroandrographolide, a noncytotoxic analogue of andrographolide, in allergic airway inflammation. J Nat Prod. 2011 Jun 24;74(6):1484-90.

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