Data Sheet (Cat.No.TN1448)

TargetMol
A DRUG SCREENING EXPERT

Bornyl acetate

Chemical Properties

CAS No.:	5655-61-8
Formula:	C12H20O2
Molecular Weight:	196.28
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Bornyl acetate shows highly active whitening and antioxidant activities, has potential applications in cosmeceutical materials.
Targets(IC_{50})	p38: None NF-κB: None JNK: None
In vitro	RAW 264.7 cells were pretreated with Bornyl acetate 1 h before LPS stimulation and cell-free super supernatants were collected to measure cytokine concentrations. To induce acute lung injury, BALB/c mice were injected intranasally with LPS and treated with Bornyl acetate 1 h before LPS stimulation. Seven hours after administration, the bronchoalveolar lavage fluid (BALF) was collected for measuring the cell count and cytokine production. We collected lungs for assaying wet-to-dry weight ratio, myeloperoxidase activity, and histologic changes. The extent of phosphorylation of mitogen-activated protein kinases and nuclear factor κB was detected by Western blot. Our results showed that Bornyl acetate downregulated the levels of proinflammatory cytokines in vitro and in vivo; reduced the number of total cells, neutrophils, and macrophages in BALF; attenuated the histologic alterations in the lung; decreased the wet-to-dry weight ratio in BALF; and suppressed NF-kappa-B inhibitor alpha, extracellular regulated protein kinases, c-JunN-terminal kinase, p38 mitogen-activated protein kinase activation[1]

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.095 mL	25.474 mL	50.948 mL
5 mM	1.019 mL	5.095 mL	10.19 mL
10 mM	0.509 mL	2.547 mL	5.095 mL
50 mM	0.102 mL	0.509 mL	1.019 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Inhibition of lung inflammatory responses by bornyl acetate is correlated with regulation of myeloperoxidase activity.J Surg Res. 2014 Jan;186(1):436-45.

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