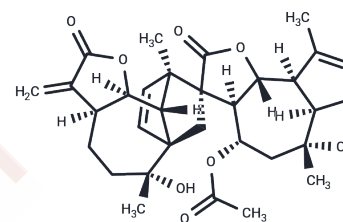


Handelin

Chemical Properties

CAS No. :	62687-22-3
Formula:	C ₃₂ H ₄₀ O ₈
Molecular Weight:	552.66
Storage:	Keep away from direct sunlight, Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	Handelin has anti-inflammatory activity by inhibiting NF-κB activation and pro-inflammatory cytokine productions.
Targets(IC50)	NF-κB, Immunology/Inflammation related
In vitro	The present study was designed to investigate the anti-inflammatory potential of Handelin in vitro and in vivo. Handelin inhibited LPS-stimulated production of NO and PGE2 in cultured mouse macrophage RAW 264.7 cells. The suppression of NO and PGE2 production by Handelin was correlated with the down-regulation of mRNA and protein expressions of iNOS and COX-2. Further study revealed that Handelin suppressed the induction of pro-inflammatory cytokines including TNF-α and IL-1β as well as microRNA-155 in LPS-induced RAW264.7 cells. Activation of the transcriptional activity of NF-κB by LPS was also alleviated by Handelin, which was well coincided with its inhibitory effect on IκB degradation. In addition, the activation of MAPKs such as ERK and JNK signaling was suppressed by Handelin. In in vivo animal model, oral administration of Handelin inhibited carrageenan-induced paw edema and TPA-induced ear edema, respectively. The analysis of cytokine production in serum showed that Handelin dose-dependently inhibited the production of IL-1β in a carrageenan-induced paw edema.

Solubility Information

Solubility	DMSO: 10 mg/mL (18.09 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 1 mg/mL (1.81 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8094 mL	9.0472 mL	18.0943 mL
5 mM	0.3619 mL	1.8094 mL	3.6189 mL
10 mM	0.1809 mL	0.9047 mL	1.8094 mL
50 mM	0.0362 mL	0.1809 mL	0.3619 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Request full-text Anti-inflammatory activity of handelin through the modulation of NF- κ B signaling and pro-inflammatory cytokine productions *Planta Med* 2012; 78 - PD86.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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