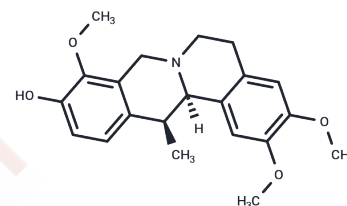


Yuanhunine

Chemical Properties

CAS No. :	104387-15-7
Formula:	C ₂₁ H ₂₅ N ₂ O ₄
Molecular Weight:	355.43
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Yuanhunine is a natural product for research related to life sciences. The catalog number is TN6392 and the CAS number is 104387-15-7.
In vitro	<p>METHODS AND RESULTS: We have assessed the release of histamine from mast cells by smooth muscle contraction. 0.3 microg/ml compound 48/80 showed no effect on concentration-response relationship of histamine in rabbit aorta. Compound 48/80 induced release of histamine from rat mast cells. When aorta was stimulated by compound 48/80 in the presence of mast cells, contraction was evoked in concentration-dependent manner. This mast cell-dependent contraction was completely blocked by H1 receptor antagonist, 1 microM diphenhydramine. When mast cells was treated with compound 48/80 inhibitor benzalkonium chloride, mast cell-dependent contraction was inhibited, although benzalkonium chloride itself showed no effect on concentration-response relationship of histamine in rabbit aorta. At high concentration of 10 microg/ml, benzalkonium chloride itself evoked histamine release from mast cells and indeed inhibitory effect of 10 microg/ml benzalkonium chloride on mast cell-dependent contraction was lower than that of 3 microg/ml. We have applied this bioassay to search anti-allergic ingredient from a total methanolic extract of Corydalis tuber (Corydalis turtschaninovii BESSER forma yanhusuo Y. H. CHOU et C. C. HSU). Successively, we have isolated five fractions. The fractions I-IV are identified to be corybulbine (1), tetrahydropalmatine (2), corydaline (3) and Yuanhunine (4), respectively. Main component of fraction V is the mixture of 3 and canadine (5). Fractions II and V significantly inhibited mast cell-dependent contraction in rabbit aorta as well as inhibited histamine release from rat mast cells. Furthermore, fractions I, III and V inhibited histamine-induced contraction in rabbit aorta at non-competitive manner. CONCLUSIONS: From these results, combination of rat mast cells and rabbit aorta is good bioassay to search the anti-allergic ingredient, and we have obtained effective fractions from Corydalis tuber using this assay.</p>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8135 mL	14.0675 mL	28.1349 mL
5 mM	0.5627 mL	2.8135 mL	5.627 mL
10 mM	0.2813 mL	1.4067 mL	2.8135 mL
50 mM	0.0563 mL	0.2813 mL	0.5627 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

The combination of rat mast cell and rabbit aortic smooth muscle is the simple bioassay for the screening of anti-allergic ingredient from methanolic extract of Corydalis tuber. Biol Pharm Bull. 2004 Aug;27(8):1270-4.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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