

Yuanhunine

Chemical Properties

| | |
|-------------------|--|
| CAS No.: | 104387-15-7 |
| Formula: | C ₂₁ H ₂₅ NO ₄ |
| Molecular Weight: | N/A |
| Appearance: | N/A |
| Storage: | 0-4°C for short term (days to weeks), or -20°C for long term (months). |

Biological Description

| | |
|----------|--|
| 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 <i>Corydalis tuber</i> (<i>Corydalis turtschaninovii</i> BESSER forma <i>yanhusuo</i> 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 <i>Corydalis tuber</i> using this assay.</p> |
|----------|--|

Solubility Information

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

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 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. 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.
1. 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.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street,Wellesley Hills,MA 02481