

Gancaonin G

Chemical Properties

| | |
|-------------------|--|
| CAS No.: | 126716-34-5 |
| Formula: | C ₂₁ H ₂₀ O ₅ |
| Molecular Weight: | 352.39 |
| Appearance: | N/A |
| Storage: | 0-4°C for short term (days to weeks), or -20°C for long term (months). |

Biological Description

| | |
|----------------------------|---|
| Description | Gancaonin G shows antibacterial effects on the MRSA strains with MIC values of 16 microg/ml, it also shows more moderate antibacterial activity against Streptococcus mutans. |
| Targets(IC ₅₀) | Antifection: None |
| In vitro | METHODS AND RESULTS: From the roots of Glycyrrhiza uralensis, two new pterocarpenes, glycyrrhizol A (1) and glycyrrhizol B (2), along with four known isoflavonoids, 5-O-methylglycyrol (3), isoglycyrol (4), 6,8-diisoprenyl-5,7,4'-trihydroxyisoflavone (5), and Gancaonin G (6), were isolated using a bioassay-guided fractionation method. The structures of the new compounds (1 and 2) were elucidated by spectroscopic data interpretation. The known compounds (3-6) were identified by comparison of their spectroscopic data with reported values in the literature. CONCLUSIONS: Glycyrrhizol A (1) and 6,8-diisoprenyl-5,7,4'-trihydroxyisoflavone (5) exhibited potent antibacterial activity against Streptococcus mutans with minimum inhibitory concentrations of 1 and 2 microg/mL, respectively, while glycyrrhizol B (2) and Gancaonin G (6) showed more moderate activity. |

Solubility Information

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

| | 1mg | 5mg | 10mg |
|-------|----------|-----------|-----------|
| 1 mM | 2.838 mL | 14.189 mL | 28.378 mL |
| 5 mM | 0.568 mL | 2.838 mL | 5.676 mL |
| 10 mM | 0.284 mL | 1.419 mL | 2.838 mL |
| 50 mM | 0.057 mL | 0.284 mL | 0.568 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 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

- Antibacterial compounds from Glycyrrhiza uralensis. J Nat Prod. 2006 Jan;69(1):121-4.
- Phenolic constituents of licorice. VIII. Structures of glicophenone and glicoisoflavanone, and effects of licorice phenolics on methicillin-resistant Staphylococcus aureus. Chem Pharm Bull (Tokyo). 2000 Sep;48(9):1286-92.

Inhibitors · Natural Compounds · Compound Libraries

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