

## Data Sheet (Cat.No.TN3333)

#### Abiesadine N

## **Chemical Properties**

CAS No.: 1159913-80-0 Formula: C21H30O3

Molecular Weight: 330.5 Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

## **Biological Description**

| Targets(IC <sub>50</sub> ) | Others: None  |
|----------------------------|---|
| In vitro                   | METHODS AND RESULTS: Twenty-five new (abiesadines A-Y, 1-25, Abiesadine N) and 29 known (26-54) diterpenes were isolated from the aerial parts of Abies georgei. Abiesadine A (1) is a novel 8,14-seco-abietane, while abiesadine B (2) is a novel 9,10-seco-abietane. The structures of the new compounds were established on the basis of spectroscopic data analysis. CONCLUSIONS: Manool (52) showed the strongest effect against LPS-induced NO production in RAW264.7 macrophages with the IC50 value of 11.0 μg/mL. In another anti-inflammatory assay against TNFα-triggered NF- $\hat{l}$ °B activity, (12R,13R)-8,12-epoxy-14-labden-13-ol (54) exhibited the strongest effect (IC50 = 8.7 μg/mL). For antitumor assays, pomiferin A (26) and 8,11,13-abietatriene-7α,18-diol (29) both showed the most significant activity against LOVO cells (IC50 = 9.2 μg/mL). While 7-oxocallitrisic acid (46) exhibited significant cytotoxicity against QGY-7703 tumor cells (IC50 = 10.2 μg/mL). |

# **Solubility Information**

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

### **Preparing Stock Solutions**

|       | 1mg      | 5mg       | 10mg      |
|-------|----------|-----------|-----------|
| 1 mM  | 3.026 mL | 15.129 mL | 30.257 mL |
| 5 mM  | 0.605 mL | 3.026 mL  | 6.051 mL  |
| 10 mM | 0.303 mL | 1.513 mL  | 3.026 mL  |
| 50 mM | 0.061 mL | 0.303 mL  | 0.605 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

1. Isolation, structure, and bioactivities of abiesadines A-Y, 25 new diterpenes from Abies georgei Orr. Bioorganic & medicinal chemistry, 2010, 18(2):744-754.

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