

## **Product** Data Sheet

# Guaiacin

**Cat. No.:** HY-N2247 **CAS No.:** 36531-08-5

Molecular Formula:  $C_{20}H_{24}O_4$ Molecular Weight: 328.4

Target: Phosphatase

Pathway: Metabolic Enzyme/Protease

4°C, protect from light

\* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

### **SOLVENT & SOLUBILITY**

In Vitro

Storage:

DMSO: 50 mg/mL (152.25 mM; Need ultrasonic)

| Preparing<br>Stock Solutions | Solvent Mass<br>Concentration | 1 mg      | 5 mg       | 10 mg      |
|------------------------------|-------------------------------|-----------|------------|------------|
|                              | 1 mM                          | 3.0451 mL | 15.2253 mL | 30.4507 mL |
|                              | 5 mM                          | 0.6090 mL | 3.0451 mL  | 6.0901 mL  |
|                              | 10 mM                         | 0.3045 mL | 1.5225 mL  | 3.0451 mL  |

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline) Solubility:  $\geq$  1.25 mg/mL (3.81 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

Guaiacin is a arylnaphthalene type lignin isolated from the barks of Machilus thunbergii SIEB. et ZUCC (Lauraceae). Guaiacin significantly increases alkaline phosphatase activity and osteoblast differentiation<sup>[1]</sup>.

#### **REFERENCES**

 $[1]. \ Lee \ MK, et \ al. \ Stimulatory \ activity \ of \ lignans \ from \ Machilus \ thunbergii \ on \ osteoblast \ differentiation. \ Biol \ Pharm \ Bull. \ 2007 \ Apr; 30(4):814-7.$ 

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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