

Product data sheet



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| MedKoo Cat#: 464418 Name: Piperitone CAS: 89-81-6 Chemical Formula: C ₁₀ H ₁₆ O Exact Mass: 152.1201 Molecular Weight: 152.237 | |
| Product supplied as: Powder | |
| Purity (by HPLC): ≥ 98% | |
| Shipping conditions: Ambient temperature | |
| Storage conditions: Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks. | |

1. Product description:

Piperitone is a monoterpene that has been found in *Mentha* and has diverse biological activities. It is active against *E. coli*, *P. aeruginosa*, *S. typhimurium*, *S. aureus*, *R. leguminosarum*, and *B. subtilis* in agar diffusion assays. Piperitone enhances the antibacterial activity of nitrofurantoin against several nitrofurantoin-resistant species of Enterobacteriaceae, including *C. freundii*, *E. coli*, and *S. marcescens*, by 3- to 20-fold. It exhibits feeding deterrent and repellent activities against ants (*Crematogaster*) with 80% deterrence index (D80) and 80% repellent index (R80) values of 0.13 µg/µl and 8.9 µg/cm², respectively. Piperitone is insecticidal against *C. maculatus* eggs, larvae, and adults.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

| Solvent | Max Conc. mg/mL | Max Conc. mM |
|----------------------------|-----------------|--------------|
| DMSO | 100.0 | 656.87 |
| Ethanol | 30.0 | 197.06 |
| Ethanol:PBS (pH 7.2) (1:6) | 0.14 | 0.92 |

4. Stock solution preparation table:

| Concentration / Solvent Volume / Mass | 1 mg | 5 mg | 10 mg |
|---------------------------------------|---------|----------|----------|
| 1 mM | 6.57 mL | 32.85 mL | 65.69 mL |
| 5 mM | 1.31 mL | 6.57 mL | 13.14 mL |
| 10 mM | 0.66 mL | 3.29 mL | 6.57 mL |
| 50 mM | 0.13 mL | 0.66 mL | 1.31 mL |

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

TBD

In vivo study

TBD

7. Bioactivity

Biological target:

Piperitone is a powerful repellent and antiappetent agent.

In vitro activity

Product data sheet



TBD

In vivo activity

TBD

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.