**PRODUCT INFORMATION**

**Bakuchiol**

*Item No. 11684*

- **CAS Registry No.:** 10309-37-2
- **Formal Name:** 4-[(1E,3S)-3-ethenyl-3,7-dimethyl-1,6-octadien-1-yl]-phenol
- **Synonym:** (S)-(+) Bakuchiol
- **MF:** C_{18}H_{24}O
- **FW:** 256.4
- **Purity:** ≥95%
- **UV/Vis.:** λ\text{max} = 207, 263 nm
- **Supplied as:** A neat oil
- **Storage:** -20°C
- **Stability:** ≥2 years
- **Item Origin:** Plant/Psoralea corylifolia

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Bakuchiol is supplied as a neat oil. A stock solution may be made by dissolving the bakuchiol in the solvent of choice, which should be purged with an inert gas. Bakuchiol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of bakuchiol in these solvents is approximately 30 mg/ml.

Bakuchiol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bakuchiol should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Bakuchiol has a solubility of approximately 0.25 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Bakuchiol is a natural meroterpene isolated from *P. corylifolia*, a plant used in traditional Asian medicine. In addition to having antioxidant and antibacterial actions, bakuchiol has retinol-like effects on gene expression and properties of the skin.1-3 Bakuchiol also inhibits DNA polymerase and UDP-glucuronosyltransferase 2B7 (IC\textsubscript{50} = 41 µM).4,5

### References