# PRODUCT INFORMATION



## Bisdemethoxycurcumin

Item No. 10960

CAS Registry No.: 33171-05-0

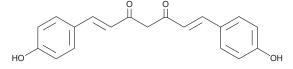
1,7-bis(4-hydroxyphenyl)-1E,6E-Formal Name:

heptadiene-3,5-dione

Synonym: **BDMC** MF: C<sub>19</sub>H<sub>16</sub>O<sub>4</sub> FW: 308.3 **Purity:** ≥98% UV/Vis.:  $\lambda_{\text{max}}$ : 419 nm Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

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



#### **Laboratory Procedures**

Bisdemethoxycurcumin (BDMC) is supplied as a crystalline solid. A stock solution may be made by dissolving the BDMC in the solvent of choice. BDMC is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of BDMC in these solvents is approximately 5, 10, and 14 mg/ml, respectively.

#### Description

BDMC is a natural demethoxy derivative of curcumin. It is a potent activator of macrophage phagocytosis, interacting with  $1\alpha,25$ -dihydroxy vitamin  $D_3$  to stimulate amyloid- $\beta$  clearance by macrophages (optimal stimulation at 100 nM BDMC). <sup>1-3</sup> More stable than curcumin in physiological media, BDMC suppresses proliferation in cancer cells. <sup>4,5</sup> It down-regulates the transcriptional coactivator p300, suppressing the Wnt/β-catenin pathway, and inhibits LPS induction of iNOS expression.<sup>6,7</sup>

### References

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- 3. Cashman, J.R., Fhirmai, S., Abel, K.J., et al. BMC Neurosci. 9, (2008).
- 4. Sandur, S.K., Pandley, M.K., Ahn, K.S., et al. Carcinogenesis 28(8), 1765-1773 (2007).
- 5. Basile, V., Ferrari, E., Lazzari, S., et al. Biochem. Pharmacol. 78(10), 1305-1315 (2009).
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WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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