

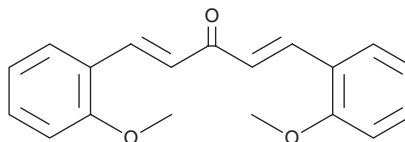
# PRODUCT INFORMATION



## Curcumin analog C1

Item No. 34255

**CAS Registry No.:** 39777-61-2  
**Formal Name:** (1E,4E)-1,5-bis(2-methoxyphenyl)-1,4-pentadien-3-one  
**Synonyms:** GO-Y019, TFEB Activator 1  
**MF:** C<sub>19</sub>H<sub>18</sub>O<sub>3</sub>  
**FW:** 294.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 366 nm  
**Supplied as:** A 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

Curcumin analog C1 is supplied as a solid. A stock solution may be made by dissolving the curcumin analog C1 in the solvent of choice, which should be purged with an inert gas. Curcumin analog C1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of curcumin analog C1 in ethanol is approximately 1 mg/ml and approximately 30 mg/ml in DMSO and DMF.

### Description

Curcumin analog C1 is a synthetic curcuminoid.<sup>1,2</sup> It inhibits the proliferation of HCT116 colon cancer cells (GI<sub>50</sub> = 4 μM).<sup>1</sup> Curcumin analog C1 (1 μM) activates transcription factor EB (TFEB), inducing nuclear translocation in Neuro2a mouse neuroblastoma cells.<sup>2</sup> It increases LC3-II levels and promotes autophagic flux in Neuro2a cells when used at a concentration of 1 μM. Curcumin analog C1 (10 and 25 mg/kg, p.o.) activates TFEB and increases autophagy and lysosome biogenesis in rat brain.

### References

1. Yamakoshi, H., Otori, H., Kudo, C., *et al.* Structure-activity relationship of C<sub>5</sub>-curcuminoids and synthesis of their molecular probes thereof. *Bioorg. Med. Chem.* **18(3)**, 1083-1092 (2010).
2. Song, J.-X., Sun, Y.-R., Peluso, I., *et al.* A novel curcumin analog binds to and activates TFEB in vitro and in vivo independent of MTOR inhibition. *Autophagy* **12(8)**, 1372-1389 (2016).

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
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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