

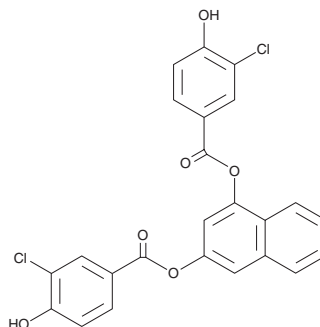
# PRODUCT INFORMATION



## UCM53

Item No. 21768

**CAS Registry No.:** 2468847-23-4  
**Formal Name:** naphthalene-1,3-diyl bis(3-chloro-4-hydroxybenzoate)  
**MF:** C<sub>24</sub>H<sub>14</sub>Cl<sub>2</sub>O<sub>6</sub>  
**FW:** 469.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 266 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

UCM53 is supplied as a crystalline solid. A stock solution may be made by dissolving the UCM53 in the solvent of choice, which should be purged with an inert gas. UCM53 is soluble in the organic solvent DMSO.

### Description

UCM53 is an inhibitor of bacterial cell division.<sup>1</sup> It binds to the GTP site of the cell division protein FtsZ from *B. subtilis* in a fluorescent anisotropy assay. In *B. subtilis*, UCM53 (3 μM) reduces the number of FtsZ rings and increases the number of foci, as well as induces filamentation when used at a concentration of 12 μM. It is active against laboratory strains and clinical isolates of the Gram-positive bacteria *B. subtilis*, *S. aureus*, *E. faecium*, and *E. faecalis* (MICs = 2-8 mg/L) but is less effective against *S. pneumoniae* and the Gram-negative bacteria *P. aeruginosa*, *E. coli*, and *K. pneumoniae* (MICs = 32-128 mg/L). UCM53 inhibits cell growth in a panel of cancerous (IC<sub>50</sub>s = 16.9-76.5 mg/L) and non-cancerous mammalian cell lines (IC<sub>50</sub>s = 23.5-93.9 mg/L).

### Reference

1. Ruiz-Avila, L.B., Huecas, S., Artola, M., et al. Synthetic inhibitors of bacterial cell division targeting the GTP-binding site of FtsZ. *ACS Chem. Biol.* **8**(9), 2072-2083 (2013).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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