PRODUCT INFORMATION



CAY10503

Item No. 10008872

CAS Registry No.: 890854-82-7

Formal Name: 4-(4-hydroxyphenyl)phenyl-3,5-

benzenediol

MF: $C_{18}H_{14}O_3$ FW: 278.3 **Purity:** ≥98%

 λ_{max} : 207, 291 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥2 years

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

Laboratory Procedures

CAY10503 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10503 in the solvent of choice, which should be purged with an inert gas. CAY10503 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10503 in ethanol and DMF is approximately 30 mg/ml and approximately 20 mg/ml in DMSO.

CAY10503 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10503should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. CAY10503 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CAY10503 is a proapoptotic, antiproliferative compound that is able to arrest cell cycle progression in the G_0 - G_1 phase. CAY10503 inhibits the growth of HL60, multidrug resistant HL60R, and K562 cells with IC_{50} values of 7.0, 23, and 20 μ M, respectively. Accumulation of HL60 cells in G_0 - G_1 occurred within eight hours following treatment with 50 µM CAY10503, whereas 10 µM CAY10503 required 96 hours for cell cycle arrest to appear. CAY10503 also induces differentiation of HL60 cells into the following positive cells: CD14 (monocytic marker) as well as CD11b and CD11c (granulocytic markers). Approximately 60% of HL60 cells exposed to 10 μ M CAY10503 expressed these markers within 72 hours. ¹

Reference

1. Roberti, M., Pizzirani, D., Recanatini, M., et al. Identification of a terphenyl derivative that blocks the cell cycle in the G₀-G₁ phase and induces differentiation in leukemia cells. J. Med. Chem. 49(10), 3012-3018 (2006).

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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