PRODUCT INFORMATION



CCT018159

Item No. 10012591

CAS Registry No.: 171009-07-7

Formal Name: 4-[4-(2,3-dihydo-1,4-benzodioxin-6-yl)-

5-methyl-1H-pyrazol-3-yl]-6-ethyl-1,3-

benzenediol

MF: $C_{20}H_{20}N_2O_4$

352.4 FW: ≥95% **Purity:**

UV/Vis.: λ_{max} : 268, 293 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.



CCT018159 is supplied as a crystalline solid. A stock solution may be made by dissolving the CCT018159 in the solvent of choice, which should be purged with an inert gas. CCT018159 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CCT018159 in these solvents is approximately 30 mg/ml.

CCT018159 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CCT018159 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. CCT018159 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The heat shock protein 90 (Hsp90) is a molecular chaperone that activates and maintains the biological functioning of several client proteins, many of which are associated with oncogenic signaling pathways. Its activity is driven by ATP and regulated by co-chaperones such as Hsp72. CCT018159 is a 3,4-diaryl pyrazoloresorcinol compound that inhibits the ATPase activity of Hsp90 with IC $_{50}$ values of 3.2 and 6.6 μ M for human Hsp90 β and yeast Hsp90, respectively. At concentrations up to 100 μ M, CCT018159 does not inhibit human Hsp72 ATPase or topoisomerase II, yet at 50 μM CCT018159 inhibits 13 out of a panel of 20 commonly studied kinases. In human tumor xenografts, such as SKMEL 28 melanoma cells, CCT018159 induces Hsp72 expression and decreases the expression of oncogenic client proteins such as c-Raf, ErbB2, and Cdk4.1

Reference

1. Sharp, S.Y., Boxall, K., Rowlands, M., et al. In vitro biological characterization of a novel, synthetic diaryl pyrazole resorcinol class of heat shock protein 90 inhibitors. Cancer Res. 67(5), 2206-2216 (2007).

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.

WARRANTY AND LIMITATION OF REMEDY

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