

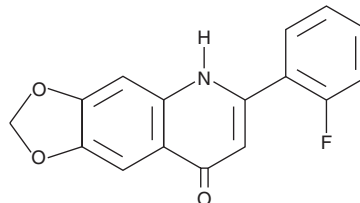
# PRODUCT INFORMATION



## CHM-1

Item No. 27647

**CAS Registry No.:** 154554-41-3  
**Formal Name:** 6-(2-fluorophenyl)-1,3-dioxolo[4,5-g]quinolin-8(5H)-one  
**Synonym:** NSC 656158  
**MF:** C<sub>16</sub>H<sub>10</sub>FNO<sub>3</sub>  
**FW:** 283.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 228, 256, 326 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

CHM-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the CHM-1 in the solvent of choice, which should be purged with an inert gas. CHM-1 is soluble in DMSO.

### Description

CHM-1 is an inhibitor of tubulin polymerization (IC<sub>50</sub> = 0.68 μM) with anticancer activity.<sup>1</sup> It inhibits colchicine (Item No. 9000760) tubulin binding by 39% when used at a concentration of 5 μM. CHM-1 inhibits the growth of K562, NCI H226, HCT116, OVCAR-3, RXF 393L, SK-MEL-5, SF-268, and SF-295 cancer cells (mean GI<sub>50</sub> = 130 nM). It induces apoptosis in HA22T hepatocellular carcinoma cells in a concentration-dependent manner.<sup>2</sup> CHM-1 (10 mg/kg) reduces tumor volume and increases survival in an HA22T mouse xenograft model.

### References

1. Xia, Y., Yang, Z.-Y., Xia, P., *et al.* Antitumor agents. 211. Fluorinated 2-phenyl-4-quinolone derivatives as antimitotic antitumor agents. *J. Med. Chem.* **44**(23), 3932-3936 (2001).
2. Wang, S.-W., Pan, S.-L., Huang, Y.-C., *et al.* CHM-1, a novel synthetic quinolone with potent and selective antimitotic antitumor activity against human hepatocellular carcinoma *in vitro* and *in vivo*. *Mol. Cancer Ther.* **7**(2), 350-360 (2008).

#### 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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