

# PRODUCT INFORMATION

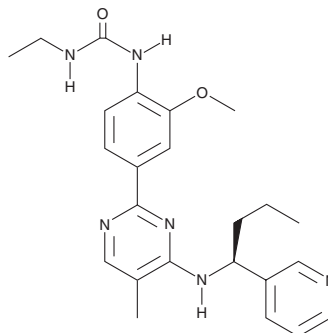


## CYT997

Item No. 18395

**CAS Registry No.:** 917111-44-5  
**Formal Name:** N-ethyl-N'-[2-methoxy-4-[5-methyl-4-[[[(1S)-1-(3-pyridinyl)butyl]amino]-2-pyrimidinyl]phenyl]-urea

**Synonym:** Lexibulin  
**MF:** C<sub>24</sub>H<sub>30</sub>N<sub>6</sub>O<sub>2</sub>  
**FW:** 434.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 210, 237, 265, 317 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

CYT997 is supplied as a crystalline solid. A stock solution may be made by dissolving the CYT997 in the solvent of choice, which should be purged with an inert gas. CYT997 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CYT997 in ethanol is approximately 16 mg/ml and approximately 20 mg/ml in DMSO and DMF.

CYT997 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CYT997 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. DMF has a solubility of approximately 0.04 mg/ml in a 1:20 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

CYT997 is an inhibitor of microtubule polymerization (IC<sub>50</sub> = ~3 μM).<sup>1</sup> It induces cell cycle arrest at the G<sub>2</sub>/M phase and is cytotoxic against a panel of cancer cell lines (IC<sub>50</sub>s = 0.009-0.101 μM). CYT997 increases human umbilical vein endothelial cell (HUVEC) monolayer permeability (IC<sub>50</sub> = ~0.08 μM), a marker of vascular collapse. It decreases liver metastasis in a murine DMH-induced colon cancer model when administered at doses of 5, 10, and 15 mg/kg.<sup>2</sup>

### References

1. Burns, C.J., Fantino, E., Philips, I.D., *et al.* CYT997: A novel orally active tubulin polymerization inhibitor with potent cytotoxic and vascular disrupting activity *in vitro* and *in vivo*. *Mol. Cancer Ther.* **8**(11), 3036-3045 (2009).
2. Burns, C.J., Fantino, E., Powell, A.K., *et al.* The microtubule depolymerizing agent CYT997 causes extensive ablation of tumor vasculature *in vivo*. *J. Pharmacol. Exp. Ther.* **339**(3), 799-806 (2011).

#### 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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