

Product Data Sheet

Product Name: Indibulin
Cat. No.: GC36308

Chemical Properties

Cas. No. 204205-90-3

SMILES O=C(NC1=CC=NC=C1)C(C2=CN(CC3=CC=C(Cl)C=C3)C4=C2C=CC=C4)=O

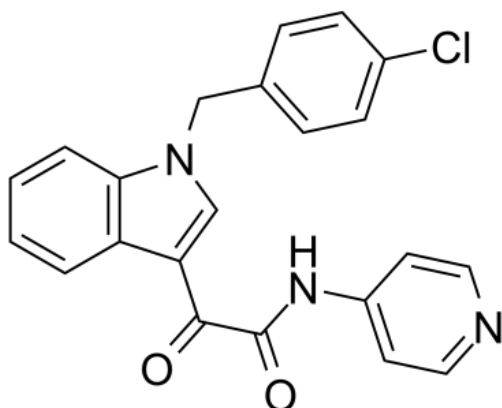
Formula $C_{22}H_{16}ClN_3O_2$ M.Wt 389.83

Solubility DMSO: 50 mg/mL (128.26 mM) Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Indibulin (ZIO 301), an orally applicable inhibitor of tubulin assembly, shows potent anticancer activity with a minimal neurotoxicity. Indibulin reduces inter-kinetochoric tension, produces aberrant spindles, activates mitotic checkpoint proteins Mad2 and BubR1, and induces mitotic arrest and apoptosis[1]. Tubulin[1]

Indibulin (300-2100 nM; 48 hours) inhibits the proliferation of MCF-7 cells with an IC₅₀ of 150 nM[1]. Indibulin (300, 600 nM; 48 hours) blocks the cells in the G2/M phase indicating that indibulin blocks

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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the progression of the cell cycle at mitosis[1]. Indibulin (150-600 nM; 24 hours) induces apoptosis in MCF-7 cells[1]. Indibulin (150-600 nM; 48 hours) with 300 and 600 nM generates cleaved fragments of PARP protein the treatment of MCF-7 cells[1]. Cell Proliferation Assay[1] Cell Line: MCF-7 cells

[1]. Kapoor S, et al. Indibulin dampens microtubule dynamics and produces synergistic antiproliferative effect with vinblastine in MCF-7 cells: Implications in cancer chemotherapy. Sci Rep. 2018 Aug 17;8(1):12363.

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