

[Open Peer Review on Qeios](#)

Plinabulin

National Cancer Institute

Source

National Cancer Institute. *Plinabulin*. NCI Thesaurus. Code C62444.

An orally active diketopiperazine derivative with potential antineoplastic activity. Plinabulin selectively targets and binds to the colchicine-binding site of tubulin, thereby interrupting equilibrium of microtubule dynamics. This disrupts mitotic spindle assembly leading to cell cycle arrest at M phase and blockage of cell division. In addition, plinabulin may also inhibit growth of proliferating vascular endothelial cells, thereby disrupting the function of tumor vasculature that further contributes to a decrease in tumor cell proliferation.