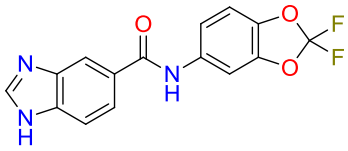
UORSY
unlimited
discovery
opportunities

UORSY Tubulin Inhibitors

Microtubules affect cell shape, motility, transport and mitosis,[1] which make them desirable targets for anticancer treatment. Microtubule inhibitors, with both destabilizing and stabilizing action mechanisms, are known as antimitotic drugs.[2] However, resistance to a range of tubulin-binding agents, as a consequence of β-tubulin mutations, has remained an unresolved issue.[3]

For creating a tubulin inhibitors library, we docked our screening compound library against crystal structures of the known protein-tubulin complexes (4YJ2, 5C8Y, 5CA1).[4,5] The docking was performed into the binding site of colchicine-derived inhibitors resulting in a set of 2023 compounds.



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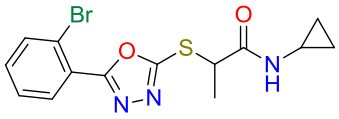

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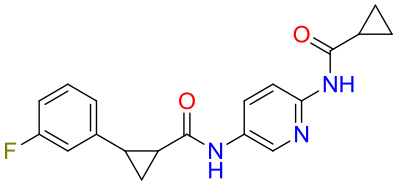

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Physicochemical profiles of **UORSY tubulin inhibitors**:
300<MW<400; 2<HbA<8; 0<HbD<4; -1<logP<5; 0<Fsp^3<0.7; 2<RotBonds<9, 19<TPSA<165.

UORSY tubulin inhibitors are available in stock and could be delivered within 2 weeks in any customer-preferred format: as powders, dry films or DMSO solutions formatted in vials, 96 or 384-well plates. All compounds have a minimum purity of 90% assessed by ^{1}H NMR; analytical data is provided.

For more information, please contact us at **screenlibs@uorsy.com**

[1] Eva Nogales, *Annu Rev Biomol Struct*, **2001**, 30, 397-420
[2] Edith A. Perez, *Mol Cancer Ther*, **2009**, 8(8), 2086-2095
[3] Maria Kavallaris, *Nat Rev Cancer*, **2010**, 10(3), 194-204
[4] Yuxi Wang et al, *Febs J*, **2016**, 283, 102-111
[5] Dan E. McNamara et al, *Protein Sci*, **2015**, 24, 1164-1172