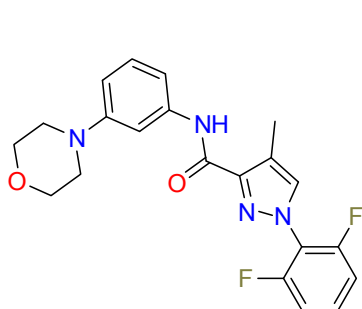


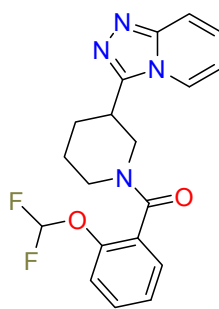
### DCLK1 modulators

DCLK1 kinase is a homologue of DCX kinase, a microtubule-associated protein, crucial for neuronal migration and developing of nervous system. The *N* terminus of DCLK1 encodes a MT-binding domain with high homology to DCX, the C terminus of DCLK1 is unique and encodes a domain similar to Ca<sup>2+</sup>/calmodulin-dependent kinases (CaMKs).<sup>1</sup> DCLK is a PSD component and plays role in synaptic functions. Understanding its importance, we have created a library of DCLK1 modulators.

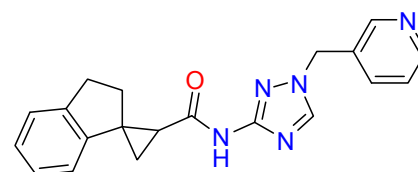
All in-stock compounds, possessing activity towards DCLK1 was chosen basing on the similarity approach and then clustered. 4 clusters were obtained and a pharmacophore model for each cluster was built.<sup>2,3</sup> Additionally, exclusion of pharmacophore's volume due to bound ligand was performed.



PB1815887882



BBV-50241796



PB1280690881

Physicochemical profiles of **UORSY DCLK1 modulators**:

300<MW<500; 2<HbA<9; 0<HbD<3; 0<logP<6; RotBonds≤8; TPSA<145.

**UORSY DCLK1 modulators** are available as powders, dry films or DMSO solutions. All compounds have a minimum purity of 90% assessed by <sup>1</sup>H NMR; analytical data is provided.

For more information, please contact us at [screenlibs@uorsy.com](mailto:screenlibs@uorsy.com)

<sup>2</sup>Shin, E. et. al, *Nat. Commun.* **2013**, 4, 1440.

<sup>3</sup>Lindvall, M. et. al, *ACS Med. Chem. Lett.* **2011**, 2, 720–723.

<sup>4</sup>Zheng, Y. et. al, *Bioorg. Med. Chem. Lett.* **2013**, 23, 3523–3530.