

LCC'S MOLECULES OF THE MONTH

Electrophilic PROTACs

Our September edition of Molecules of the Month is focused on an excellent paper published this week by Tao et al., titled 'Targeted Protein Degradation by Electrophilic PROTACs that Stereo selectively and Site-Specifically Engage DCAF1'.¹ The work demonstrates the ability to identify ligandable sites on E3 ligases for targeted protein degradation, using stereo chemically defined electrophilic compound sets.

The findings of the paper lie close to LCC's ongoing mission...

'to improve access to chirally pure chemical space for NCE discovery and development'.

Since we specialize in the development of chiral heterocyclic compounds, we are in a great position to offer sets of enantiopairs for use in chemoproteomics. Moreover, as a high proportion of our synthons contain an amine synthetic handle, they are ready to be modified with a covalent warhead.

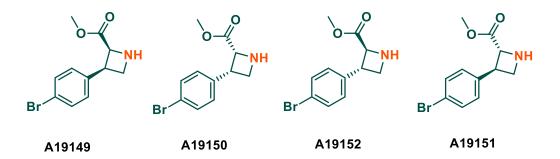


Fig 1.Example set of LCC's stereo chemically defined synthons, with free amine available for warhead addition using our parallel synthesis lab.

Combining this, with the expanding capabilities of our parallel synthesis laboratory, we are perfectly suited to complement projects involving stereo defined electrophilic compound sets.

We join this group and the many others in appreciating the **importance of being able to easily** access chirally pure scaffolds, to instantly identify real hits through comparing activity with the other enantiomer in the screen.

1.Y. Tao, D. Remillard, E. Vinogradova, M. Yokoyama, S. Banchenko, D. Schwefel, B. Melillo, S. Schreiber, X. Zhang and B. Cravatt, *Journal of the American Chemical Society*, 2022.

Please contact us at sales@liverpoolchirochem.com to discuss how we can support your projects.