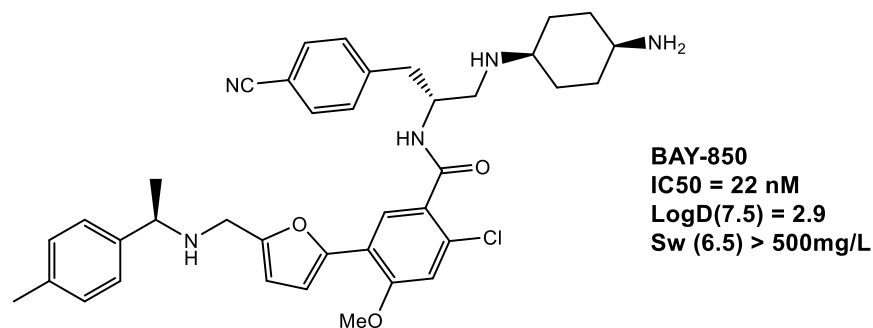


# ***BAY-850, the discovery of an ATAD2 chemical probe with an unprecedented mode of action***

On behalf of Bayer HealthCare, a chemistry **Hit-to-Lead optimization program** was conducted by Edelris against ATAD2.

The epigenetic regulator ATAD2 has been proposed to play a key role in cancer control, however, further validation of the role of ATAD2 in different cancer indications was limited by the absence of selective, potent, and cell-active ATAD2 inhibitors. We conducted the **medicinal chemistry optimization** of several chemical series of ATAD2 bromodomain binders initially identified from DNA-encoded compound libraries



After rounds of **potency and properties optimization**, our efforts resulted in the **identification of BAY-850**, a potent and cell active isoform-selective ATAD2 chemical probe **showing unprecedented chemical structure and mode of action**.

Isoform-Selective ATAD2 Chemical Probe with Novel Chemical Structure and Unusual Mode of Action. DOI: [10.1021/acscchembio.7b00708](https://doi.org/10.1021/acscchembio.7b00708)