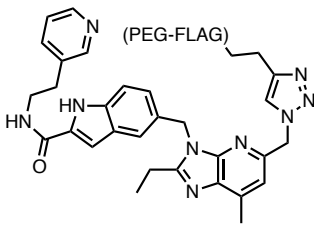
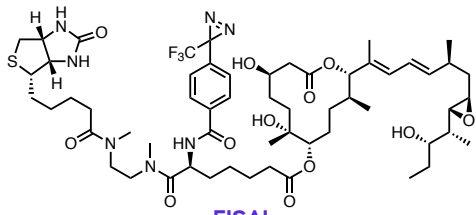
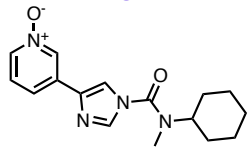

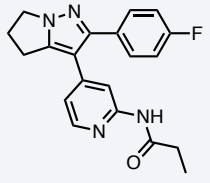


Target Identification Methods in Phenotypic Drug Discovery

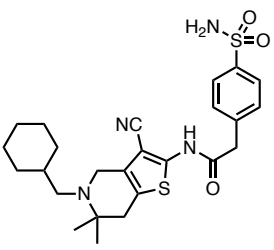
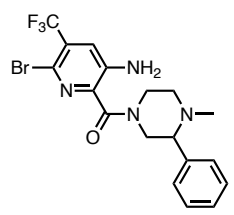
Chemical Probe-Based

| METHOD | INDUSTRY APPLICATION | TARGET (LIGAND) | EXAMPLE REFERENCE |
|----------------------------------|--|---------------------|---|
| Affinity-Based Pulldown |  KYOWA KIRIN | NAMPT (K542) | Yamaguchi, D. et al. <i>Sci. Rep.</i> 2019 , 9, 7742. |
| Photoaffinity Labeling |  EISAI | SF3b (pladienolide) | Kotake, Y. et al. <i>Nat. Chem. Biol.</i> 2007 , 3, 570. |
| Activity-Based Protein Profiling |  PFIZER+ | ALDH2 (BIA 10-2474) | Huang, Z. et al. <i>ACS Chem. Biol.</i> 2019 , 14, 192. |

Label-Free Methods

| | | | |
|---|---|-----------------------|--|
| Thermal Stability Profiling (CETSA®) |  MERCK | DPP9 (ICeD-2) | Moore, K. P. et al. <i>ACS Chem. Biol.</i> 2022 , 17, 2595. |
| Chemical/Proteolytic Stability Profiling (e.g. SPROX, DARTS, LiP, PP..) |  BAYER+ | Fungal CK1 (BAYE-004) | Piazza, I. et al. <i>Nat. Commun.</i> 2020 , 11, 4200. |

Indirect Methods

| | | | |
|------------------------|---|------------------------------|--|
| Resistance Screening |  NOVARTIS | Dengue NS4B (NITD-688) | Moquin, S. A. et al. <i>Sci. Transl. Med.</i> 2021 , 13, issue 579. |
| Chemogenomic Profiling |  NOVARTIS | Fungal Sec14p ('compound 1') | Pries, V. et al. <i>Cell Chem. Biol.</i> 2018 , 25, 279. |