COMPOSITION OF THE F2X-UNIVERSAL AND F2X-ENTRY FRAGMENT LIBRARIES

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Representing the Available Fragment Space

Crystallographic fragment screening (CFS) provides excellent starting points for drug discovery or biochemical tool compound development. A prerequisite for effective CFS is a versatile fragment library. Here, we present the assembly of the 1,103 compound F2X-Universal Library and its 96-compound sub-selection, the F2X-Entry Screen. Both represent the available fragment space and are highly diverse in terms of their 3D-pharmacophore variations.

Pharmacophore diversity was achieved by hierarchical clustering based on ROCS similarity.

All 1103 Fragments Contained in the F2X-Universal Library and the F2X-Entry Sub-Selection (central box)

Results of Screening Campaign

- F2X-Entry Screen validated by two crystallographic fragment-screening campaigns
- High hit rates: 30% versus endothiapepsin and 21% versus the Aa2/RNaseH protein complex
- Formulation as immobilized, dry compounds allows for soaking with and without DMSO

For crystal structures & details see Poster of Jan Wollenhaupt

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https://www.helmholtz-berlin.de/forschung/oe/np/gmx/fragment-screening

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