

# **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 prerequisites 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.

#### **F2X** libraries

clustering available fragment space



### **Results of Screening Campaign**

- F2X-Entry Screen validated by two crystallographic fragment-screening campaigns
- High hit rates: 30% versus endothiapepsin and 21% versus the Aar2/RNaseH protein complex

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

fastROCS, OpenEye Scientific Software. http://www.eyesopen.com.



• Formulation as immobilized, dry compounds allows for soaking with and without DMSO

Wollenhaupt and Metz et al., Structure 2020, 28, 694.

#### For crystal structures & details see Poster of Jan Wollenhaupt

At present, the F2X-Universal Library and the F2X-Entry Screen are available for users of the macromolecular crystallography beamlines of the BESSY II synchrotron in Berlin free-of-charge on the basis of a collaboration contract. Moreover, the F2X-Entry Screen will be made available to everyone on the basis of a material transfer agreement.

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



