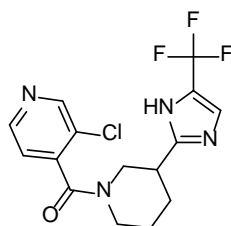


Discovery Diversity Sets

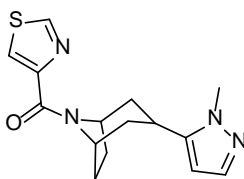
Pre-plated sets of 10,240 and 50,240 Novel Diverse Compounds

Only between 2014 and 2016 Enamine synthesized over **430,000 non-exclusive screening compounds**, which feature our new diversity of Enamine-exclusive building blocks and scaffolds. Having the largest commercial screening collection in the world, Enamine remains the only library producer that keeps enhancing its collection with significant number of new compounds each year. The renowned Enamine quality of compounds has been distilled in the design of two **Discovery Diversity Sets (DDS)**. They compose of 10 and 50 thousand highly diverse compounds produced only within last three years. Discovery Diversity Sets are based only on the lead-like compounds including representatives of all three screening collections of Enamine – *HTS, Advanced, and Premium*. The two sets do not overlap and deliver a total of 60 thousand compounds. The Discovery Diversity Sets are highly recommended for random screening against new as well as popular targets because they are based on diverse novel scaffolds and latest building blocks. The hits discovered are expected to easily yield lead compounds. They can be readily followed with analogues either from stock or from new syntheses. All building blocks are readily available from Enamine stock.

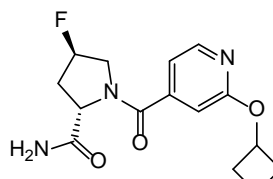
Representative examples of centroid molecules in DDS:



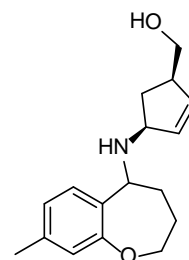
Z1885611703
MW 358
ClogP 1.89



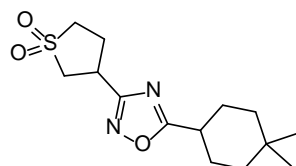
Z2017826378
MW 302
ClogP 1.38



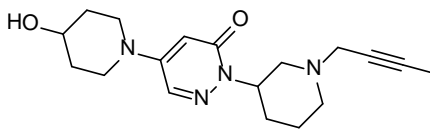
Z2060539340
MW 307
ClogP 0.43



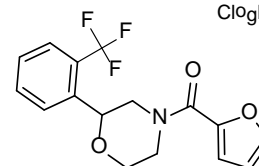
Z1647886734
MW 273
ClogP 2.43



Z1683527071
MW 298
ClogP 2.19



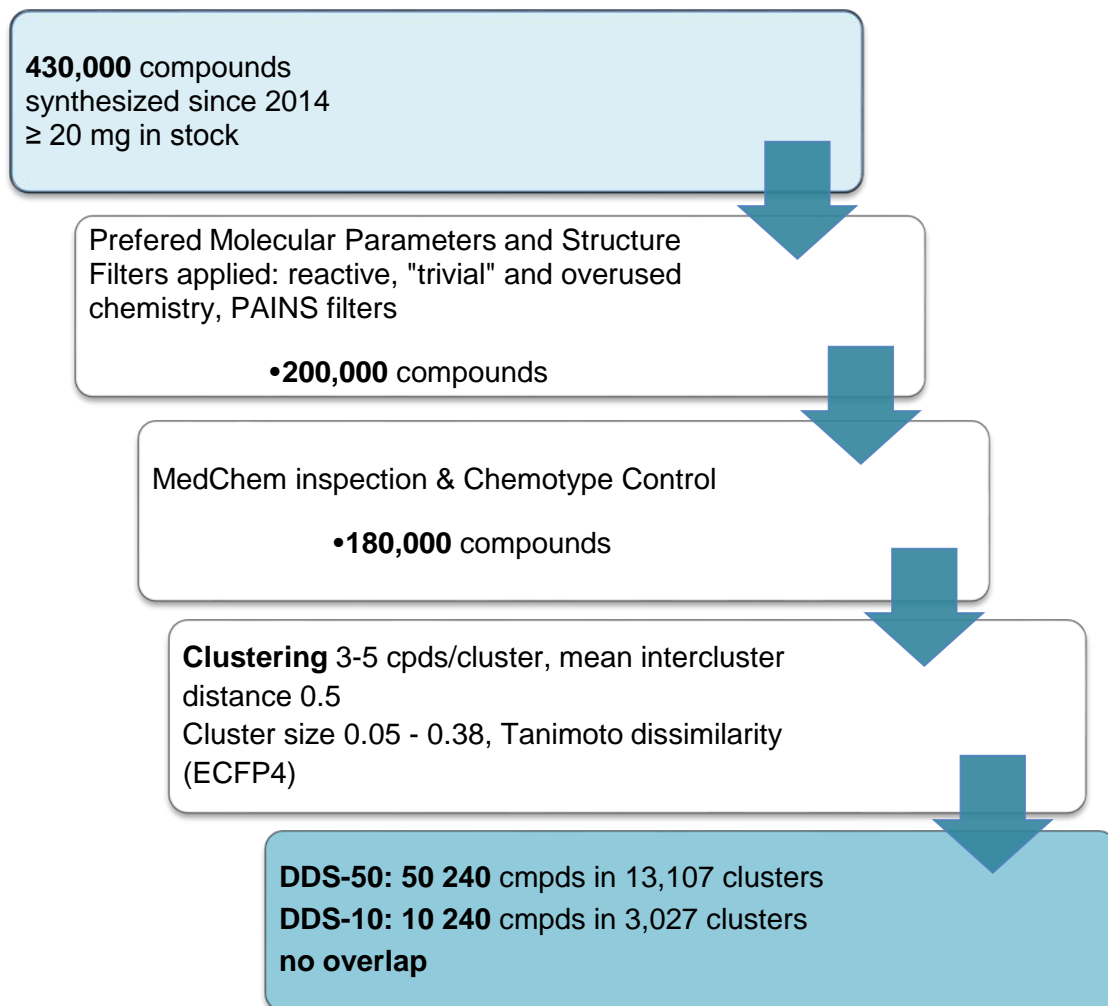
Z1849917226
MW 330
ClogP 0.47

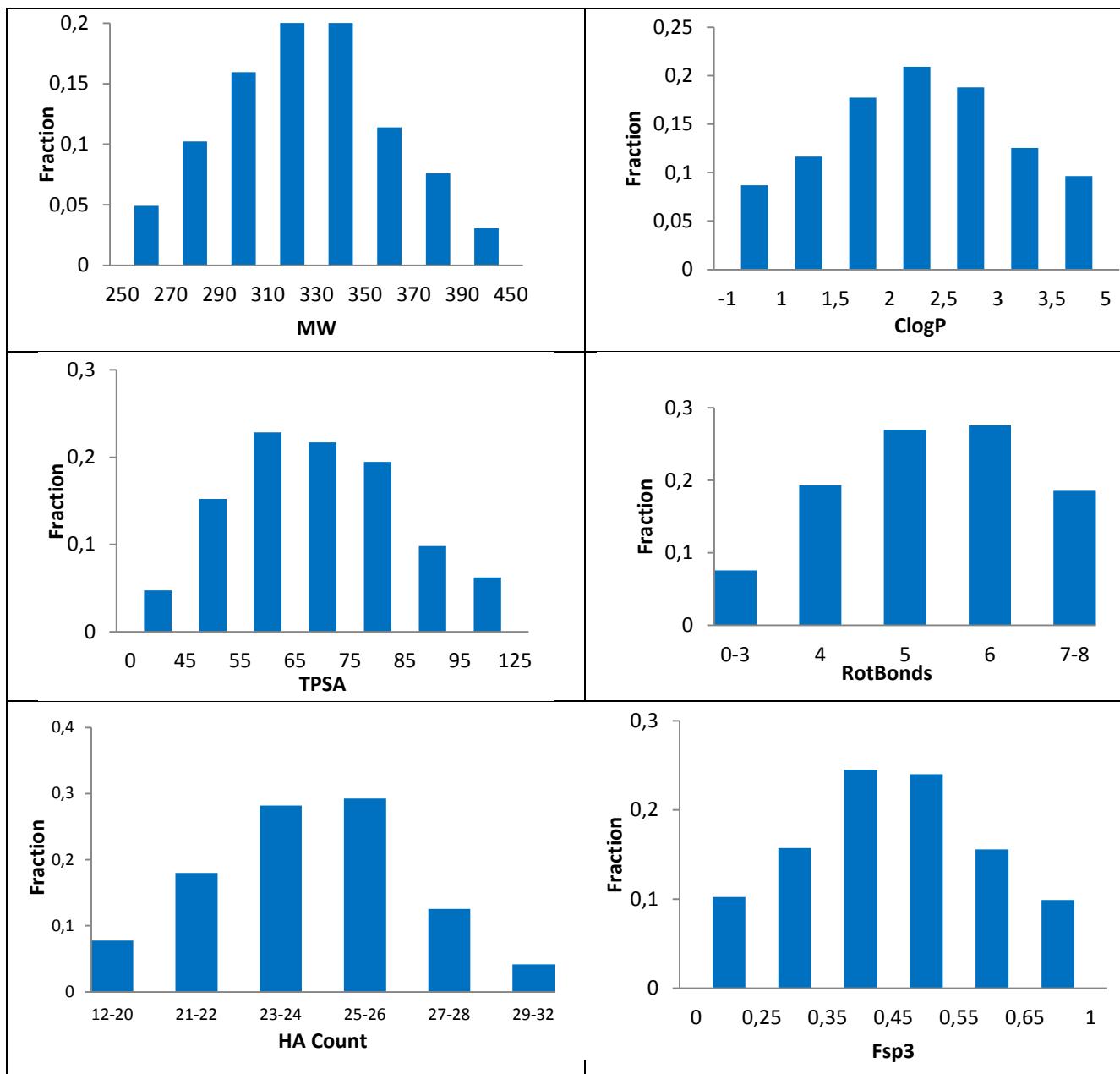


Z1640823403
MW 325
ClogP 2.78

Appendix 1. Catalogue Numbers

Item	Catalog No.	No of compounds	Amount	Plates and format
1	DDS-10-Y-0	10 240	One-shot screening , e.g. 4 μ L of 2 mM DMSO solution	384-well plates (Matrix Cat. No 4312), 320 cpds per plate: first two and last two columns empty
2	DDS-10-Y-50	10 240	50 μ L of 10 mM DMSO solution	384-well plates (Matrix Cat. No 4312), 320 cpds per plate: first two and last two columns empty
3	DDS-10-X-100	10 240	100 μ L of 10 mM DMSO solution	96-well plates (Matrix Cat. No 4919), 80 cpds per plate: first and last columns empty
4	DDS-10-X-300	10 240	300 μ L of 10 mM DMSO solution	96-well plates (Matrix Cat. No 4919), 80 cpds per plate: first and last columns empty
5	DDS-10-1m	10 240	1 mg dry films	0.75 mL microtubes in latch racks (Matrix Cat. No 4271)
6	DDS-50-Y-0	50 240	One-shot screening , e.g. 4 μ L of 2 mM DMSO solution	384-well plates (Matrix Cat. No 4312), 320 cpds per plate: first two and last two columns empty
7	DDS-50-Y-50	50 240	50 μ L of 10 mM DMSO solution	384-well plates (Matrix Cat. No 4312), 320 cpds per plate: first two and last two columns empty
8	DDS-50-Y-100	50 240	100 μ L of 10 mM DMSO solution	384-well plates (Matrix Cat. No 4312), 320 cpds per plate: first two and last two columns empty
9	DDS-50-1m	50 240	1 mg dry films	0.75 mL microtubes in latch racks (Matrix Cat. No 4271)

Appendix 2. Design of Discovery Diversity Sets

Appendix 3. Molecular profile of DDS-50


Appendix 4. Molecular profile of DDS-10
