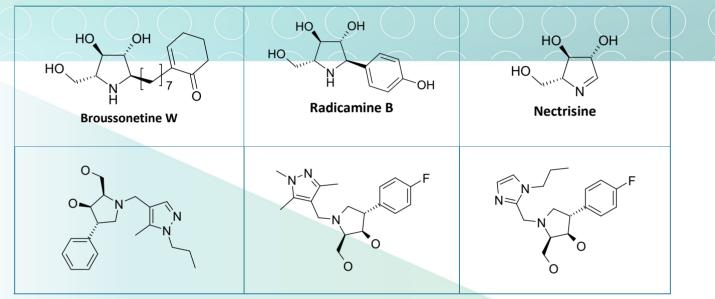
ASINEX Signature Libraries

SL-28. Glycomimetics (Pyrrolidine)

Carbohydrates are fundamental components of every cell surface where they are involved in vital cellular recognition processes. Despite their physiological importance they are rarely used as drugs due to their poor pharmacodynamic and pharmacokinetic properties. However, functional and structural analogs of natural sugars commonly referred to as glycomimetics provide additional opportunities for medicinal application.

Pyrrolidine is one of the most frequently occurring rings in nature and its polyhydroxylated derivatives are referred to as azasugars. Some natural azasugars such as radicamine B, broussonetines, nectrisine, preussin, were found to inhibit specific glycosidases which indicates there could be therapeutic application in the treatment of metabolic, infectious, immunological disorders, and cancer [1, 2, 3].

Via a proprietary synthetic method [4], ASINEX has created a library of pyrrolidine azasugars. The final molecules retain important carbohydrate pharmacophoric features making them valuable chemical probes for studying carbohydraterecognition processes [3].



Signature Library 28

Formats		Supplementary Information	
80 compounds per plate		SL#28_Glycomimetics-4_06-16.sdf	
0.1 mg; 1 mg; 2 mg dry film/powder			
0.1 µmol; 1 µmol DMSO sc	lutions		

References:

- 1. Tetrahedron 63 (2007) 6346–6357 doi: 10.1016/j.tet.2007.02.087
- 2. Proc. Indian Natn. Sci. Acad. 2005, 71A, 155-173
- 3. Future Med Chem. 2011 Sep;3(12):1513-21. doi: 10.4155/fmc.11.117.
- 4. Nature Communications 6, Article number: 6903 doi:10.1038/ncomms7903

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