

**S1 Table. Canadian Compound Collection (CYCC) Library**

<b>Subset</b>	<b>Number of compounds</b>	<b>Description</b>
<b>Custom Library</b> (Maybridge, Ltd. Cornwall, UK)	16,000	Synthetic small molecules; Average MW = 325 g/mol
<b>DIVERSet</b> (ChemBridge Corp., San Diego, CA, USA)	9,989	Synthetic small molecules; Average MW = 325 g/mol
<b>Prestwick Chemical Library</b> (Prestwick Chemical, Illkirch, France)	1,120	Off-patent small molecules; >85% FDA approved; Average MW = 325 g/mol
<b>Natural Products Library</b> (BIOMOL International, L.P., Plymouth Meeting, PA, USA)	361	Natural products; Average MW = 350 g/mol
<b>Lopac1280 (International Version)</b> (Sigma-Aldrich Canada Ltd., Oakville, ON, Canada)	885	Pharmacologically active small molecules; Average MW = 350 g/mol
<b>Spectrum Collection</b> (MicroSource Discovery Systems, Inc., Gaylordsville, CT, USA)	1,214	Natural products and bioactives; average MW = 350 g/mol
<b>Dennis Hall Compounds</b> Chem. Dept., University of Alberta	690	Synthesized lactams, lactones and piperidines
<b>Total # compounds</b>	30,259	