The SGC conducts pre-competitive, open access research to facilitate new drug discovery programs. The consortium generates knowledge and reagents that can be used to validate therapeutic targets.

Since 2008, the SGC led the development of chemical probes which inhibit or antagonize proteins involved in epigenetic signaling. These chemical probes are made available to the research community with no restriction on use: innovation for everyone.

SGC Chemical Probes are small, drug-like molecules which meet these criteria:
- *in vitro* $IC_{50}$ or $K_d < 100$ nM
- $>30$-fold selectivity over proteins in the same family
- significant on-target cellular activity at 1 $\mu$M
- negative control

This initiative is sustained by a team of cross-disciplinary scientists from industry and academia specializing in Research Informatics, Biotechnology, Biophysics, and Structural and Chemical Biology.

www.thesgc.org/chemical-probes

Contact: suzanne.ackloo@utoronto.ca

<table>
<thead>
<tr>
<th>Epigenetic protein</th>
<th>Chemical probe</th>
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<tbody>
<tr>
<td>ATAD2</td>
<td>(+)-JQ1, PFI-1, GSK973, GSK778</td>
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<td>BET family</td>
<td>GSK2801, BA22-ICR</td>
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<td>L-Moses, GSK4027</td>
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*pro-drug
## Epigenetic Chemical Probes

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<th>Domain: Target</th>
<th>Probe</th>
<th>Cell line/Assay, Target/Biomarker</th>
<th>IC(<em>{50})/EC(</em>{50}) (nM)</th>
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* pro-drug; † alphascreeen; ‡ microscale thermophoresis; §ITC; ‡‡ TR-FRET