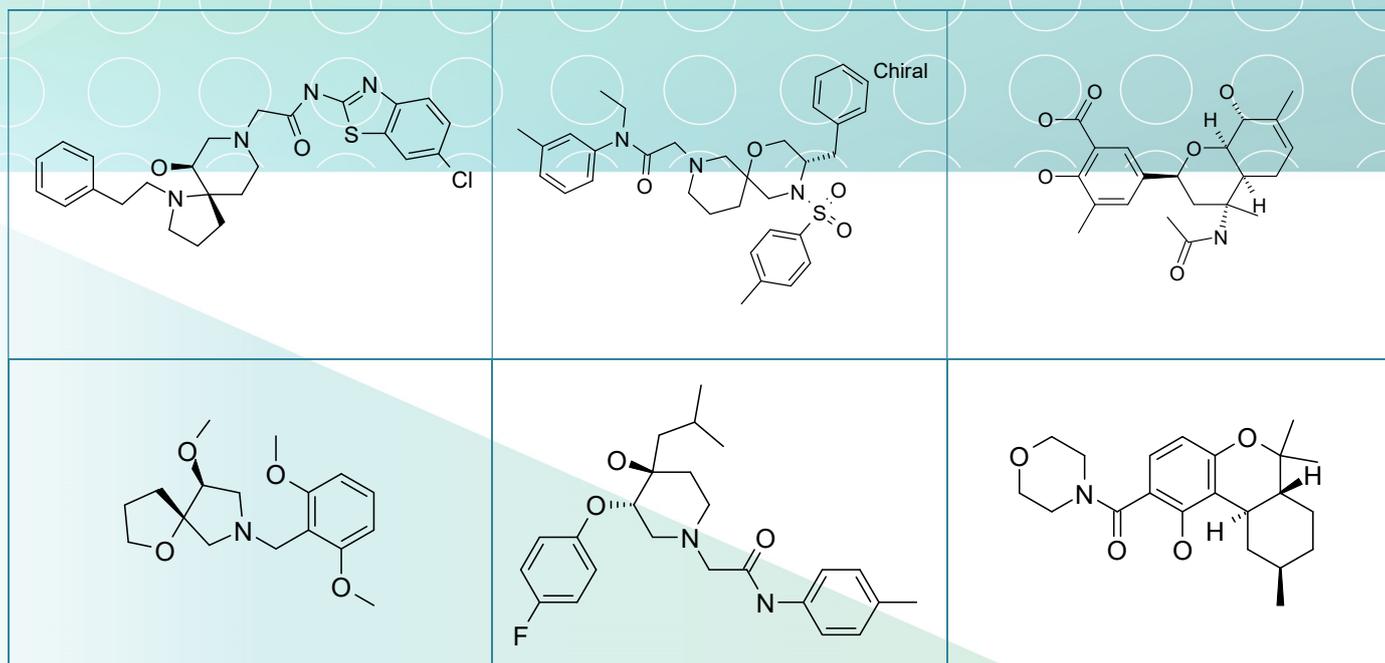


## SL-24. STAT-3 inhibitors

STAT3 signaling is frequently activated in malignant cells leading to over-expression and accumulation of anti-apoptotic proteins. [1]. STAT3 is the lowest point of fusion of many signaling pathways, thus providing an attractive target for therapeutic intervention in the treatment of cancer [2]. Inhibition of the STAT3 signaling pathway can be achieved by various mechanisms [3].

In order to identify compounds that can inhibit STAT3 activation we screened > 10,000 natural product-like compounds

in HepG2 cells transfected with the STAT3 reporter. As a result, several hit clusters were identified with sub uM potency in a cell-based assay. Structurally, the hit compounds incorporate several interesting natural product-like features such as bicyclic spirocores, iminosugars, and saturated fused rings. These compounds can be used as probes for further chemical biology studies across the STAT3 pathway.



### Signature Library 24

Formats	Supplementary Information
80 compounds per plate 0.1 mg; 1 mg; 2 mg dry film/powder 0.1 μmol; 1 μmol DMSO solutions	SL#24_STAT-3_06-16.sdf

#### References:

1. *PNAS*, 2000, 97: 4227-4232
2. *Int. J of Oncology*, 2012, 1181-1191 DOI: 10.3892/ijo.2012.1568
3. *Expert Opin. Investig. Drugs* (2011) 20(9):1263-1275 doi: 10.1517/13543784.2011.601739

#### Contact us:

USA: +1 336 721 1617  
Japan: +81-80-3401-9097  
Europe/Global:

[mparisi@asinex.com](mailto:mparisi@asinex.com)  
[sota@asinex.com](mailto:sota@asinex.com)  
[lsadovenko@asinex.com](mailto:lsadovenko@asinex.com)