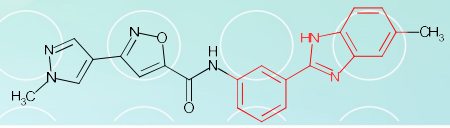
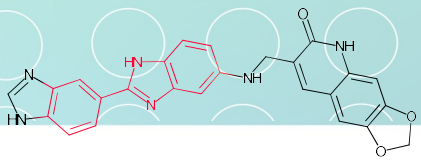
SL-63. Preferred RNA-binding motifs

A recent study on RNA–small molecule ligand interactions revealed several scaffolds that allow recognition of RNA motifs: hairpins, internal loops and bulges. Preferred scaffolds include 2-phenyl indole, 2-phenyl benzimidazole chemotypes [1]. A small molecule Targapremir-210 belonging to the 2-phenyl benzimidazole scaffold was shown to bind to the Dicer site of the miR-210 hairpin precursor inhibiting production of the mature miRNA [2]. miR-210 regulates hypoxia inducible factors and plays a critical role in cancer maintenance [2]. Small molecules that can selectively target specific miRNAs are promising therapeutic agents against several cancers [3].

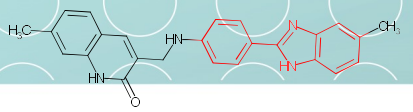
80 molecules containing the privileged 2-phenyl benzimidazole fragment were included in this library.



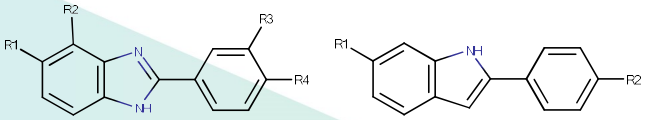
LAS 23011230



LAS 07407958



LAS 07407793



Preferrred Scaffolds for miRNA binding[1,2]

Signature Library 63

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#63_BenzImidaz_miR.sdf

References:

1. *Nature Communications* volume 3, 1125 (2012); doi:10.1038/ncomms2119
2. *J Am Chem Soc*. 2017 Mar 8;139(9):3446-3455. doi: 10.1021/jacs.6b11273
3. *Topics in Medicinal Chemistry* · May 2017, doi: 10.1007/7355_2017_3

Contact us:

USA:	+1 336 721 1617	mparisi@asinex.com
Japan:	+81-80-3401-9097	sota@asinex.com
Europe/Global:		lsadovenko@asinex.com