

Supporting information

Identification of small molecule inhibitors of human As(III) S-adenosylmethionine methyltransferase (AS3MT)

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Running title: AS3MT inhibitors

SUPPLEMENTAL FIGURE LEGENDS

Figure S1. Scheme for synthesis of TPI compounds. Parallel solid phase synthesis of compounds TPI-1 through TPI-11 was performed as described under Materials and Methods. The amide bonds in the initial acylated peptides (1) were reduced with borane tetrahydrofuran (THF) complex solution followed by treatment with piperidine (2). After cyclization the compounds were removed from the solid support (3).

Figure S2. Chemical structure of TIPMS compounds. The structures were drawn using ChemDraw version 12.0. The core structure has four possible R-group substitutions, R1-R4, the details of which are shown in the following 11 structures. TPI-2, TPI-4, TPI-6, TPI-8 and TPI-9 inhibit both As(III) and MAs(III) methylation activity. TPI-1, TPI-3, TPI-5, TPI-7 and TPI-10 inhibit As(III) but not MAs(III) methylation activity. TPI-11 does not inhibit AS3MT.

Figure S3 Effect of compound TPI-4 on COMT activity. COMT activity was assayed as described under Materials and Methods without (left), with 50 μ M TPI-4 (middle) or 1 mM sinefungin (right).

Figure S1

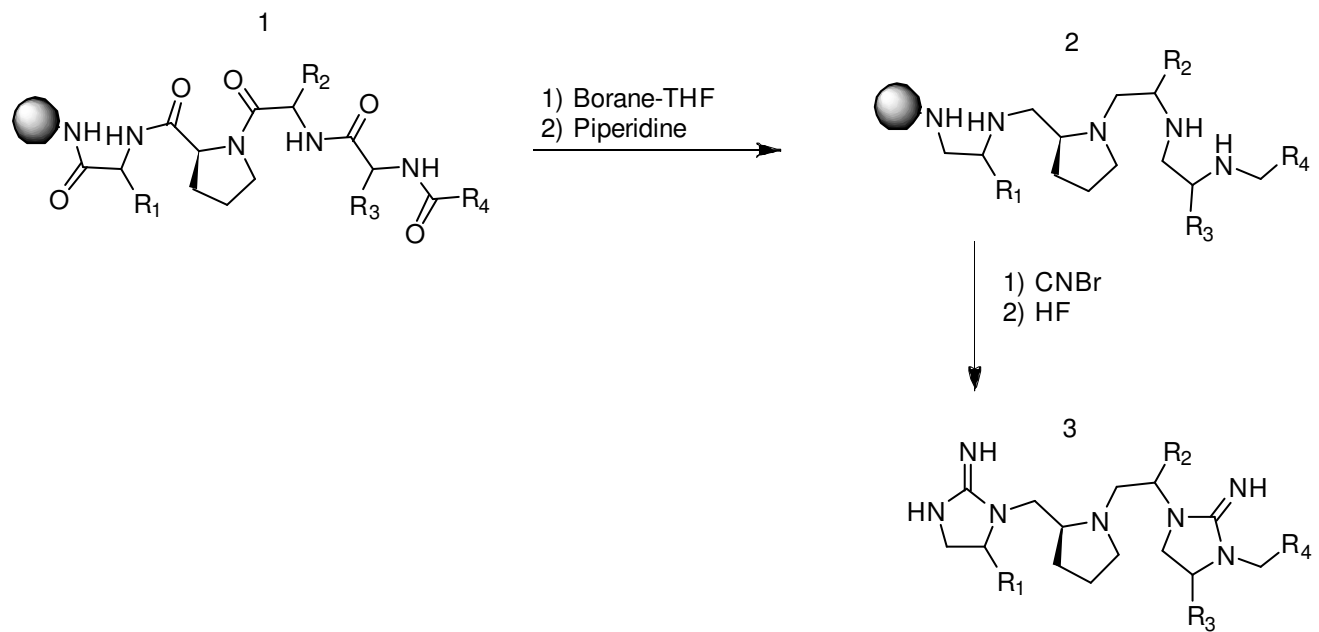


Figure S2

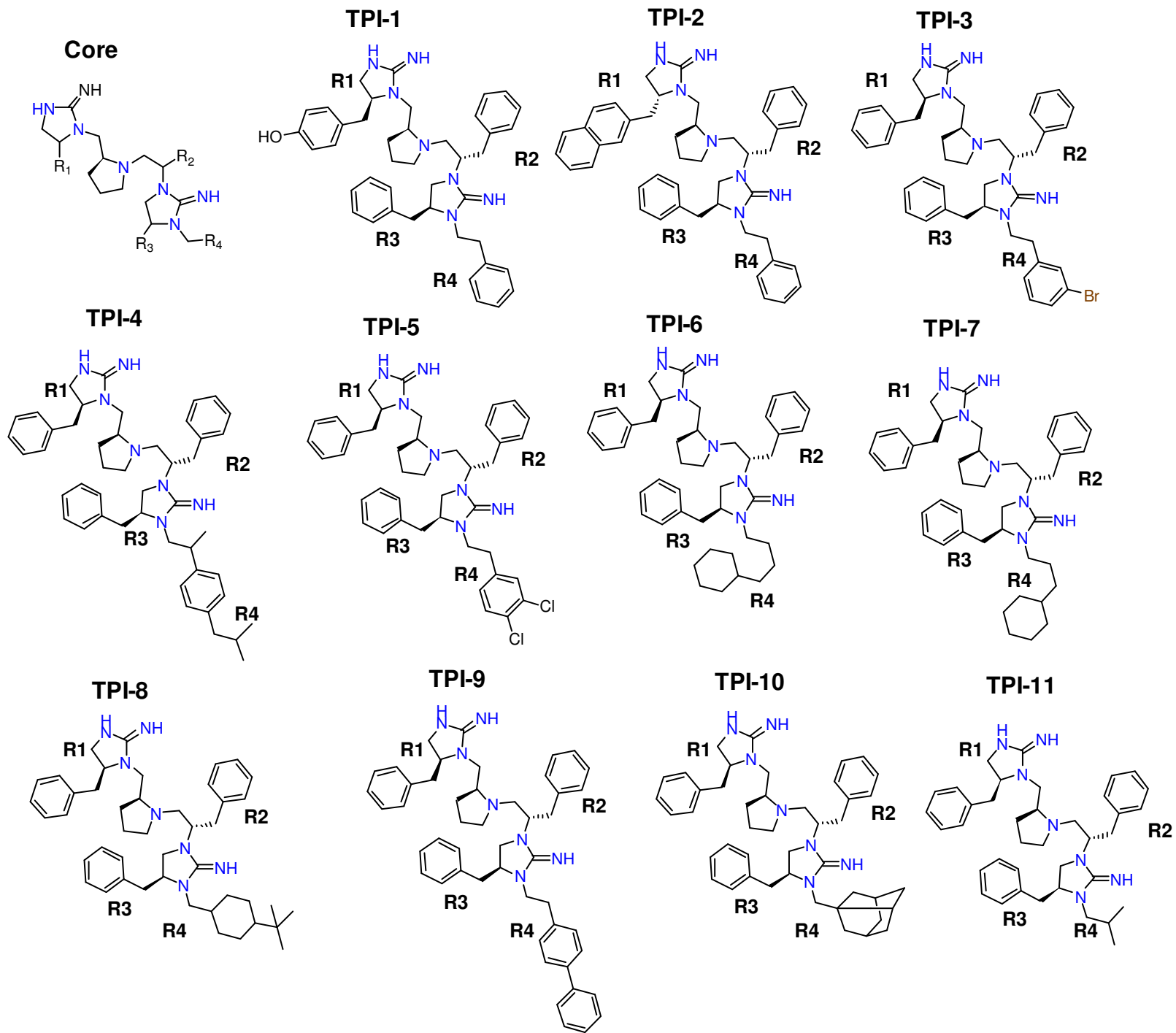


Figure S3

