Supporting Information

Design, Synthesis, and Evaluation of Diarylpyridines and Diarylanilines as Potent Non-nucleoside HIV-1 Reverse Transcriptase Inhibitors

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HPLC conditions:

HPLC analyses for purity were performed using an Agilent TC-C18 column (4.6 × 250 mm, 5 μm) eluting with a mixture of solvents A and B (Condition 1: acetonitrile/water with 0.1% formic acid 80:20, flow rate 1.2 mL/min; Condition 2: methanol/water with 0.1% formic acid 80:20, flow rate 1.0 mL/min), detected under UV wavelength at 254 nm and an injection volume of 3 μL.

Table 1. Summary of HPLC purity data for target compounds

compounds	condition-1		condition-2	
	Retention time (min)	Purity %	Retention time (min)	Purity %
11a	5.75	98.63	9.00	98.61
11b	6.36	97.24	11.78	95.44
11c	1.33	95.22	5.67	99.04
11d	3.93	98.25	7.36	96.13
11e	7.72	96.95	16.48	96.90
11f	4.81	96.63	5.01	96.87
11g	6.85	97.90	11.91	99.18
11i	2.63	97.39	4.73	98.97
11j	3.05	98.73	5.93	99.32
11k	3.77	97.99	5.74	96.04
11m	3.78	98.08	5.63	98.67
12c	7.41	95.40	8.66	96.97
12d	5.41	99.47	6.84	100.00
12e	6.23	97.15	6.25	96.98
13a	10.36	95.72	7.56	95.94
13b	4.09	97.36	7.00	97.09
13c	3.84	97.40	5.30	99.18
13d	2.70	97.16	3.68	97.62
13e	4.23	96.99	7.71	98.55
13f	3.11	98.03	4.65	98.81
13i	3.54	99.44	4.46	98.95
13j	4.77	99.48	6.17	97.92
13k	4.48	97.35	6.56	97.82
13m	2.77	98.44	3.87	99.16
14c	6.11	97.94	4.93	98.13
14d	4.25	98.21	3.89	98.79
14e	4.33	100.0	4.15	97.08
14f	4.02	97.10	5.04	97.23
15	5.95	99.60	7.58	97.96

16	4.29	97.53	5.72	99.60
17	5.45	97.28	6.31	97.44
18	6.57	96.45	7.66	100.0
19	4.82	98.87	5.74	98.77
20	5.55	100.00	7.45	99.79