

Table S3: Characteristics of unique HIV-1 sncRNAs.

| Seq No. | Library <sup>(a)</sup> | Sequence (5' - 3')                                                                | Length | Position HXB2 <sup>(b)</sup> |      | Polarity  | Contig No. | sncRNA # of identical clones |
|---------|------------------------|-----------------------------------------------------------------------------------|--------|------------------------------|------|-----------|------------|------------------------------|
|         |                        |                                                                                   |        | Start                        | End  |           |            |                              |
| 1       | C                      | ATCTGAGCCTGGGAGCTCTCTGGCTAACTAGGGAACCCACTG                                        | 42     | 475                          | 516  | sense     | 1          | 3                            |
| 2       | H                      | AAAGCTTGCCTTGAGTGCTTCAAGTAGTGTGTG                                                 | 33     | 530                          | 562  | sense     | 2          | 1                            |
| 3       | J                      | AAAGCTTGCCTTGTGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTGA                                 | 49     | 530                          | 578  | sense     | 2          | 2                            |
| 4       | J                      | AAAGCTTGCCTTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTGACT                               | 51     | 530                          | 580  | sense     | 2          | 3                            |
| 5       | J                      | AAAGCTTGCCTTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTGACTCT                             | 53     | 530                          | 582  | sense     | 2          | 1                            |
| 6       | J                      | AAAGCTTGCCTTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTGACTCTGGTAACTAGAGAT                | 66     | 530                          | 595  | sense     | 2          | 2                            |
| 7       | J                      | AAGCTTGCCCTTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTGACT                               | 50     | 531                          | 580  | sense     | 2          | 6                            |
| 8       | D                      | AGCTTGCCCTTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTGA                                  | 47     | 532                          | 578  | sense     | 2          | 32                           |
| 9       | B                      | GCTTGCCCTTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTGACTCTGGTA                           | 54     | 533                          | 586  | sense     | 2          | 1                            |
| 10      | A                      | CTTGCCCTTGAGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTG                                     | 44     | 534                          | 577  | sense     | 2          | 4                            |
| 11      | D                      | TGCCTTGAGTGCTTCAAGTAGTGTGTCTGCTCTGTTGTGTGACTCTGGTAA                               | 52     | 536                          | 587  | sense     | 2          | 1                            |
| 12      | E                      | AGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGT                                                  | 32     | 543                          | 574  | sense     | 2          | 21                           |
| 13      | D                      | AGTGCTTCAAGTAGTGTGTGCCCGTCTGTTGTGTGACTCTGGTAA                                     | 45     | 543                          | 587  | sense     | 2          | 1                            |
| 14      | A                      | TCAAGTAGTGTGTGCCCGTCTGTTGTGTGACTCTGGTAA                                           | 39     | 549                          | 587  | sense     | 2          | 14                           |
| 15      | H                      | GTAGTGTGTGCCCGTCTGTTGTGTGACTCTGGTAACTAGAGATCCCT                                   | 47     | 553                          | 599  | sense     | 2          | 2                            |
| 16      | D                      | GTGTGCCCGTCTGTTGTGTGACTCTGGTAACTAGAGAT                                            | 38     | 558                          | 595  | sense     | 2          | 4                            |
| 17      | C                      | GCCCGTCTGTTGTGTGACTCTGGTAACTAGAGAT                                                | 34     | 562                          | 595  | sense     | 2          | 2                            |
| 18      | H                      | CCCGTCTGTTGTGTGACTCTGGTAACTAGAGAT                                                 | 33     | 563                          | 595  | sense     | 2          | 1                            |
| 19      | D                      | AAATCTCTAGCAGTGGCGCCGAACAGGGACTT                                                  | 33     | 623                          | 655  | sense     | 3          | 1                            |
| 20      | C                      | CCCTGTTCAAGCGCCA                                                                  | 16     | 651                          | 636  | antisense | 3          | 1                            |
| 21      | F                      | AAAGGAGAGAGATGGGTGCGAGAGCGTCAGTATT                                                | 34     | 779                          | 812  | sense     | 4          | 2                            |
| 22      | F                      | AGAGAGATGGGTGCGAGAGCGTCAGT                                                        | 26     | 784                          | 809  | sense     | 4          | 1                            |
| 23      | G                      | CTTTCCCCCTGGCCTTAGCCGAATTTTTTCCATTATCAATTTT                                       | 46     | 867                          | 822  | antisense | 5          | 9                            |
| 24      | J                      | CATATAGTATGGGCAAGCAGGGAGCTAGAACGTTTCGAGTTAATCCTGGCCTGTTAGA                        | 59     | 886                          | 944  | sense     | 6          | 1                            |
| 25      | J                      | CATATAGTATGGGCAAGCAGGGAGCTAGGACGTTTCGAGTTAATCCTGGCCTGTTAGAATCATCAGAAGGCTGTAT      | 77     | 886                          | 962  | sense     | 6          | 1                            |
| 26      | J                      | CAAGCAGGGAGCTAGAACGTTTCGAGATAATCCTGGCCTGTTAGA                                     | 46     | 899                          | 944  | sense     | 6          | 1                            |
| 27      | F                      | TTGTGTACATCAAGGATAGAGGTAAAAGACACCAAGGAAGCTTT                                      | 45     | 1047                         | 1091 | sense     | 7          | 2                            |
| 28      | C                      | AAAGACACCAAGGAAGCTTTAGAAAAGATAGAGGAA                                              | 36     | 1072                         | 1107 | sense     | 7          | 2                            |
| 29      | J                      | GACCTGGCTGCTGTTTCTGTGTCAGCTGCTGCTTGTGCTTTTTCTTACTTTTGTTTG                         | 63     | 1173                         | 1111 | antisense | 8          | 5                            |
| 30      | H                      | GCTTCCTCATTGATGGTCTCTTAGCATTTGCATGGCTGCTTGATGT                                    | 48     | 1407                         | 1368 | antisense | 9          | 2                            |
| 31      | H                      | ATTGATGGTCTCTTTAGCATTTGCATGGCTGCTTGATGT                                           | 40     | 1415                         | 1368 | antisense | 9          | 2                            |
| 32      | G                      | ACAGCTTCCTCGTTGATGGTCTCTTTAGCATTTGCATGGCTGCTTGATGT                                | 51     | 1418                         | 1368 | antisense | 9          | 27                           |
| 33      | H                      | AACCAAGGGGAAGTGACATAGCAGGAACCTACTAGTACCCCTCAG                                     | 44     | 1478                         | 1521 | sense     | 10         | 1                            |
| 34      | D                      | GTACCCCTCAGGAACAAATAGGATGGATGACAGATAATCCACCTATCCAGTAGGAGAAATTATAAAAGATGGATAATCCTG | 83     | 1511                         | 1595 | sense     | 10         | 1                            |
| 35      | J                      | AACAAATAGGATGGATGACAAATAATCCACCTATCCAGTAGGAGAAATCTATAAAAGATGGATAATCCTGGGGTTT      | 77     | 1523                         | 1599 | sense     | 10         | 1                            |
| 36      | J                      | AATAGTAAGGATGTATAGCCCTACCAGCATTCTGGACATAAGACAAGG                                  | 48     | 1605                         | 1652 | sense     | 11         | 2                            |
| 37      | H                      | AGCATTCTGGACATAAGACAAGGACCAAGGAACCCCTT                                            | 38     | 1630                         | 1667 | sense     | 11         | 1                            |
| 38      | F                      | GCATTCTGGACACAAGACAAGGACCAAGGAACCCCTTAGAGACTATGTAGACCGGTTCTT                      | 61     | 1631                         | 1691 | sense     | 11         | 1                            |
| 39      | G                      | CATTCTGGACGTAAGACAAGGACCAAGGAACCCCTTAGAGACTATGTAGACCGGTTCTA                       | 60     | 1632                         | 1691 | sense     | 11         | 1                            |
| 40      | F                      | ATTCTGGACATAAGACAAGGACCAAGGAACCCCTTAGAGACTATGTAGACCGGTTCTA                        | 59     | 1633                         | 1691 | sense     | 11         | 1                            |
| 41      | G                      | AGCCGAGCAAGCTTACAGGAGGTA                                                          | 25     | 1704                         | 1728 | sense     | 12         | 48                           |
| 42      | G                      | AACCTTGTTGGTCCAAAATGCGAACCCAGATCGTAAGA                                            | 38     | 1746                         | 1783 | sense     | 13         | 3                            |
| 43      | H                      | ACCTTGTTGGCCCAAAATGCGAACCCAGATTGTAAGATTA                                          | 40     | 1747                         | 1786 | sense     | 13         | 2                            |

| Seq No. | Library <sup>(a)</sup> | Sequence (5' - 3')                                                               | Length | Position HXB2 <sup>(b)</sup> |      | Polarity  | Contig No. | sncRNA # of identical clones |
|---------|------------------------|----------------------------------------------------------------------------------|--------|------------------------------|------|-----------|------------|------------------------------|
|         |                        |                                                                                  |        | Start                        | End  |           |            |                              |
| 44      | C                      | ACCTTGTGGTCCAAAATGCGAACCCAGATTGTAAGACTATTTTAAAAGCATTGGGACCAGCAGCCACACTAGA        | 74     | 1747                         | 1820 | sense     | 13         | 1                            |
| 45      | J                      | TACACTAGAAGAAATGATGACAGCATGTCAGGG                                                | 33     | 1812                         | 1844 | sense     | 13         | 6                            |
| 46      | H                      | GTCAGGGAGTGGGAGGACCCGGCCA                                                        | 25     | 1838                         | 1862 | sense     | 13         | 3                            |
| 47      | J                      | AGGCAATTTTAGGAGCCAAAGAAAGATTGTTAAGTGTTC AATTGTGG                                 | 48     | 1929                         | 1976 | sense     | 14         | 1                            |
| 48      | H                      | TTCAATTGTGGCAAAGAAGGGGCACATAGCCAGAAATTGCAGGG                                     | 43     | 1966                         | 2008 | sense     | 14         | 4                            |
| 49      | H                      | TGCAGGGCCCTAGGAAAAAGGGCTGTTGGAAATGTGGAAAGGAAGGA                                  | 48     | 2002                         | 2049 | sense     | 14         | 2                            |
| 50      | G                      | CACCAAATGAAAGATTGTACTGAGAGACAGG                                                  | 31     | 2050                         | 2080 | sense     | 14         | 4                            |
| 51      | H                      | TCACTCTTTGGCAACGACCCCTCGTCACAATA                                                 | 32     | 2260                         | 2291 | sense     | 15         | 1                            |
| 52      | F                      | GTATTAGAAGACATGGATTTGCCAGGAAGATGGAAA                                             | 36     | 2346                         | 2381 | sense     | 16         | 2                            |
| 53      | H                      | AACTCAAGACTTCTGGGAAGTTCAATTAGGAATACCACATCCCGCAGGGTT                              | 51     | 2798                         | 2848 | sense     | 17         | 1                            |
| 54      | J                      | ACTTCTGGGAAGTTCAATTAGGAATACCACATCCCGCAGGGTTA                                     | 44     | 2806                         | 2849 | sense     | 17         | 1                            |
| 55      | J                      | AGAGAAAATCAGTAACAGTACTGGATGTGGGTGATGCATATTTTTCAGTT                               | 50     | 2854                         | 2903 | sense     | 18         | 1                            |
| 56      | J                      | ATCAGTAACAGTACTGGATGTGGGTGATGCATATTTTTCAGTTCCTTAGATAAAGACTTCAGGAAATA             | 69     | 2861                         | 2929 | sense     | 18         | 2                            |
| 57      | H                      | AACAGTACTGGATGTGGGTGATGCATATTTTTCAGTTCCTTAGATA                                   | 47     | 2867                         | 2913 | sense     | 18         | 1                            |
| 58      | G                      | AACAGTACTGGATGTGGGTGATGCATATTTTTCAGTTCCTTAGATAAAGACTTCAGGAAATA                   | 63     | 2867                         | 2929 | sense     | 18         | 1                            |
| 59      | H                      | ACAGTACTGGATGTGGGTGATGCATATTTTTCAGTT                                             | 36     | 2868                         | 2903 | sense     | 18         | 1                            |
| 60      | H                      | ACAGTACTGGATGTGGGTGATGCATATTTTTCAGTTCCTTAGATA                                    | 46     | 2868                         | 2913 | sense     | 18         | 1                            |
| 61      | J                      | ACAGTACTGGGTGTGGGTGATGCATATTTTTCAGTTCCTTAGATAAAGACCTCAGGAAATA                    | 62     | 2868                         | 2929 | sense     | 18         | 1                            |
| 62      | J                      | ATGTGCTTCCGCAGGGATGGAAGGATCACCAGCAA                                              | 36     | 2989                         | 3024 | sense     | 19         | 1                            |
| 63      | C                      | ATCACCAGCAATATTCCAAAGTAGCATGACA                                                  | 31     | 3014                         | 3044 | sense     | 19         | 1                            |
| 64      | J                      | AACATCTGTTGAGGTGGGGGTTTACCACACCAGACAAAAAACACCAG                                  | 47     | 3169                         | 3215 | sense     | 20         | 1                            |
| 65      | J                      | ACATCTGTTGAGGTGGGGATTACCA                                                        | 26     | 3170                         | 3195 | sense     | 20         | 1                            |
| 66      | J                      | AGTCAGATTTATGCAGGGATTAAAGTAAAGCAATTATGTAAACTCCTTAGGG                             | 52     | 3351                         | 3402 | sense     | 21         | 1                            |
| 67      | H                      | TTATGTAAACTCCTTAGGGGAACCAAAGCACTAACAGAAG                                         | 40     | 3384                         | 3423 | sense     | 21         | 1                            |
| 68      | H                      | AGAAGTAATACCGCTAACAGAAGAAGCAGAGCTAGAACTGACAG                                     | 44     | 3419                         | 3462 | sense     | 21         | 1                            |
| 69      | A                      | AACATAGTGGACAGAATACTGGCAAGCCACCTGGATTCTGAGTGGGAGTTTGTCAATA                       | 59     | 3746                         | 3804 | sense     | 22         | 1                            |
| 70      | D                      | CCACCTGGATTCTGAGTGGGAGTTTGTCAATA                                                 | 33     | 3772                         | 3804 | sense     | 22         | 1                            |
| 71      | C                      | CCTGGATTCTGAGTGGGAGTTTGTCAATA                                                    | 30     | 3775                         | 3804 | sense     | 22         | 1                            |
| 72      | J                      | AATAGTAGCCAGCTGTGATAAATGTAGCTAAAAGGAGAAGCCATGCATGGACAAGTAGTT                     | 61     | 4334                         | 4394 | sense     | 23         | 2                            |
| 73      | J                      | CACATTTAGAAGGAAAAAATTATCCTGGTAGCAGTTTCATGTAGCCAGTGGATATATAGA                     | 58     | 4426                         | 4483 | sense     | 24         | 1                            |
| 74      | F                      | CCATACAGACAATGGCAGCAATTTACCAGTACTACGGTTAAGGCCGCTGTTGGTGGGCTGGGATT                | 67     | 4568                         | 4634 | sense     | 25         | 1                            |
| 75      | J                      | CGGTTAAGGCCCGCTGTTGGTGGGCTGGGATCAAGCAGGAATTTGGCATTCCCTACA                        | 57     | 4603                         | 4659 | sense     | 25         | 2                            |
| 76      | J                      | AACATCTTAAGACAGCAGTACAAATGGCAGTATTCATCCACAATTTTA                                 | 48     | 4738                         | 4785 | sense     | 26         | 1                            |
| 77      | H                      | CCGTTGCTATTATGTCTACTATTCTTCCCTGCACTGTA                                           | 40     | 4848                         | 4809 | antisense | 27         | 1                            |
| 78      | F                      | GTATGTCCGTTGCTATTATGTCTACTATTCTTCCCTGCACTGTA                                     | 46     | 4854                         | 4809 | antisense | 27         | 4                            |
| 79      | F                      | AAAGGACCAGCAAAGCTTCTCTGGAAGGTGAAGGGG                                             | 37     | 4935                         | 4971 | sense     | 28         | 20                           |
| 80      | J                      | AGATAATAGTGATATAAAAGTAGTGCCAAGAAGAAAAGTAAAGATCATTAGGGATTA                        | 57     | 4985                         | 5041 | sense     | 29         | 5                            |
| 81      | G                      | ACTATGAAAGCACTCATCCAAGAATAAGTTCAG                                                | 33     | 5168                         | 5200 | sense     | 30         | 32                           |
| 82      | F                      | ATAAGTTCAGAAGTACACATCCCACTAGGGGATGCTAGATTAGT                                     | 44     | 5191                         | 5234 | sense     | 30         | 1                            |
| 83      | F                      | AGGAGAAAGAGACTGGCATTGGGTGAGGGAGTCTCCATAGAATGGAGGA                                | 50     | 5262                         | 5311 | sense     | 31         | 1                            |
| 84      | H                      | AGACTGGCATTGGGTGAGGGAG                                                           | 23     | 5271                         | 5293 | sense     | 31         | 4                            |
| 85      | H                      | GACTGGCATTGGGTGAGGGAGT                                                           | 23     | 5272                         | 5294 | sense     | 31         | 9                            |
| 86      | F                      | TGACCTAGCAGACCAACTAATTCATCTGTATTACTTTGATTGTTTTTCAG                               | 50     | 5340                         | 5389 | sense     | 32         | 2                            |
| 87      | G                      | TTCATCTGTATTACTTTGATTGTTTTTCAGCATCTGCTAT                                         | 40     | 5360                         | 5399 | sense     | 32         | 2                            |
| 88      | C                      | ATCTGTATTACTTTGATTGTTTTTCAGCATCTGCTATAAGAAATGCCATATTAGGACATATAGTTAGTCCTAGATGTGAA | 80     | 5363                         | 5442 | sense     | 32         | 1                            |
| 89      | H                      | TTGTTTTTCAGAATCTGCTATAAAGAAATGCCATATTAGGACATATAGTTAGTCCTAG                       | 57     | 5379                         | 5435 | sense     | 32         | 1                            |

| Seq No. | Library <sup>(a)</sup> | Sequence (5' - 3')                                                             | Length | Position HXB2 <sup>(b)</sup> |      | Polarity | Contig No. | sncRNA # of identical clones |
|---------|------------------------|--------------------------------------------------------------------------------|--------|------------------------------|------|----------|------------|------------------------------|
|         |                        |                                                                                |        | Start                        | End  |          |            |                              |
| 90      | E                      | AAGAAATGCCATATTAGGACATACAGCTAGTCCTAGATGTGAATATCAAGCAGGACAT                     | 58     | 5400                         | 5457 | sense    | 32         | 1                            |
| 91      | C                      | AAATGCCATATTAGGACATATAGTTAGTCCTAGATGTGAATATCAAGCAGGACATA                       | 56     | 5403                         | 5458 | sense    | 32         | 1                            |
| 92      | D                      | AACTAACAGAGGATAGATGGAACAAGCCCCAGA                                              | 33     | 5543                         | 5575 | sense    | 33         | 1                            |
| 93      | C                      | ACACTAGAGCTTTTAGAGGAACTTAAAAGTGAAGCTGTTAGACATTTTCCTAGGGTCTGGCTTTT              | 65     | 5613                         | 5677 | sense    | 34         | 1                            |
| 94      | J                      | CATTTTCCTAGGGTCTGGCTCCATAGCTTAGGGCA                                            | 35     | 5655                         | 5689 | sense    | 34         | 13                           |
| 95      | H                      | CATTTTCCTAGGGTCTGGCTCCATAGCTTGGGGCAAT                                          | 37     | 5655                         | 5691 | sense    | 34         | 1                            |
| 96      | G                      | TACTGCAACAGCTGCTGTTTATTCATTTTCAAGAATTGGGTGTCAACAT                              | 47     | 5746                         | 5793 | sense    | 35         | 16                           |
| 97      | H                      | AACAGCCGCTGTTTATTCATTTTCAAGAATTGGGTGTCAACAT                                    | 41     | 5752                         | 5793 | sense    | 35         | 1                            |
| 98      | E                      | GCTGCTGTTTATTCATTTTCAAGAATTGGGTGTCA                                            | 33     | 5756                         | 5789 | sense    | 35         | 1                            |
| 99      | G                      | AAATGGAGCCAGTAGATCCTAGCCTAG                                                    | 27     | 5829                         | 5855 | sense    | 36         | 4                            |
| 100     | D                      | CTCCTATGGCAGGAAGAAGCGGAGACAGCGACGAAGAGCTCCTCAAGACA                             | 50     | 5965                         | 6014 | sense    | 37         | 37                           |
| 101     | J                      | CTCTATCAAAGCAGTAAGTAGTGCATGTT                                                  | 29     | 6033                         | 6061 | sense    | 38         | 1                            |
| 102     | J                      | CTCTATCAAAGCAGTAAGTAGTGCATGTTCA                                                | 31     | 6033                         | 6063 | sense    | 38         | 3                            |
| 103     | E                      | CAATAGTAGCATTAGTAGTAGCAATAATAATAGCAATAGTTGTGTGGTCCATAGTACTCATAGAATATAGGAAAAATA | 77     | 6084                         | 6160 | sense    | 39         | 3                            |
| 104     | H                      | AGTAGCATTAGTAGTAGCAATAATAATAGCAATAGTTGTGTGGT                                   | 44     | 6088                         | 6131 | sense    | 39         | 5                            |
| 105     | H                      | GTAGCATTAGTAGTAGCAATAATAATAGCAATAGTTGTGTGGTCCATA                               | 48     | 6089                         | 6136 | sense    | 39         | 1                            |
| 106     | C                      | TAGTAGCAATAATAATAGCAATAGTTGTGTGGTCCATAGTACTCATAGAATATAGGAAAA                   | 60     | 6099                         | 6158 | sense    | 39         | 1                            |
| 107     | H                      | AATAGCAATAGTTGTGTGGTCCATAGTACTCATAGA                                           | 36     | 6112                         | 6147 | sense    | 39         | 2                            |
| 108     | J                      | AAAATAGATAGGTTAATTGATAGAATAAGAGAGAGT                                           | 36     | 6173                         | 6208 | sense    | 40         | 1                            |
| 109     | H                      | ATTATCAGCACTTGTGGAGAGGGGGCACCTTGCTCCTTGAAT                                     | 43     | 6241                         | 6295 | sense    | 41         | 1                            |
| 110     | H                      | AATCAGCACTTGTGGAGAGGGGGCACCTTGCTCCTTGGAA                                       | 40     | 6243                         | 6294 | sense    | 41         | 2                            |
| 111     | H                      | CTCCTGGGATATTAATGATCTGTAGTGCTGTAGAA                                            | 36     | 6285                         | 6320 | sense    | 41         | 2                            |
| 112     | D                      | TGGAATAAATATGATCTGTAGTGCTGTAGAAAAGTTGTGGGTCACAGTCTAT                           | 52     | 6290                         | 6341 | sense    | 41         | 1                            |
| 113     | C                      | ATATTAATGATCTGTAGTGCTGTAGAAAAGTTGTGGGTCACAGT                                   | 44     | 6294                         | 6337 | sense    | 41         | 1                            |
| 114     | J                      | ATATTAATGATCTGTAGTGCTGTAGAAAAGTTGTGGGTCACAGT                                   | 44     | 6294                         | 6337 | sense    | 41         | 2                            |
| 115     | H                      | AATAATGATCTGTAGTGCTGGAGAAAAGTTGTGGGTCACAGTCT                                   | 44     | 6296                         | 6339 | sense    | 41         | 5                            |
| 116     | D                      | TAATGATCTGTAGTGCTGTAGAAAAGTTGTGGGTCACAGTCT                                     | 42     | 6298                         | 6339 | sense    | 41         | 2                            |
| 117     | G                      | AATGATCTGTAGTGCTGTAGAAAAGTTGTGGG                                               | 32     | 6299                         | 6330 | sense    | 41         | 3                            |
| 118     | G                      | ATCTGTAGTGCTGTAGAAAAGTTGTGGGT                                                  | 29     | 6303                         | 6331 | sense    | 41         | 12                           |
| 119     | J                      | CAGTCTATTGTGGGTACCTGTGTGGAGAGAAGCAACCACCCTCTATTTTGTGCATCA                      | 59     | 6334                         | 6392 | sense    | 41         | 1                            |
| 120     | C                      | GCATATGATACAGAGGTACATAATGTTTGGGCCACACATGCCTGTGTACCCACAGA                       | 56     | 6402                         | 6457 | sense    | 42         | 8                            |
| 121     | H                      | TATGATACAGAGGTACATAATGTTTGGGCCACACATGCCTGTGTACCCACAGA                          | 53     | 6405                         | 6457 | sense    | 42         | 1                            |
| 122     | E                      | ACATAATGTTTGGGCCACACATGCCTGTGTACCCACAGA                                        | 39     | 6419                         | 6457 | sense    | 42         | 2                            |
| 123     | E                      | ACATAATGTTTGGGCCACACATGCCTGTGTACCCACAGACCCTAACCACACAAGAAGTAGTATTGGAAAATGT      | 72     | 6419                         | 6490 | sense    | 42         | 6                            |
| 124     | H                      | AATGTTTGGGCCACACATGCCTGTATACCCACAGA                                            | 35     | 6423                         | 6457 | sense    | 42         | 1                            |
| 125     | D                      | ATGTTCTGGGCCACACATGCCTGTGTACCCACAGA                                            | 34     | 6424                         | 6457 | sense    | 42         | 12                           |
| 126     | H                      | TTTGGGCCACACATGCCTGTGTACCCACAGA                                                | 31     | 6427                         | 6457 | sense    | 42         | 1                            |
| 127     | H                      | TTGGGCCACACATGCCTGTGTACCCACAGA                                                 | 30     | 6428                         | 6457 | sense    | 42         | 2                            |
| 128     | D                      | CCACACATGCCTGTGTACCCACAGA                                                      | 25     | 6433                         | 6457 | sense    | 42         | 2                            |
| 129     | E                      | CCACACATGCCTGTGTACCCACAGA                                                      | 25     | 6433                         | 6457 | sense    | 42         | 1                            |
| 130     | A                      | ACACATGCCTGTGTACCCACAGA                                                        | 23     | 6435                         | 6457 | sense    | 42         | 1                            |
| 131     | E                      | CACATGCCTGTGTACCCACAGA                                                         | 22     | 6436                         | 6457 | sense    | 42         | 2                            |
| 132     | H                      | CACATGCCTGTGTACCCACAGA                                                         | 22     | 6436                         | 6457 | sense    | 42         | 1                            |
| 133     | G                      | ACATGCCTGTGTACCCACAGA                                                          | 21     | 6437                         | 6457 | sense    | 42         | 8                            |
| 134     | F                      | TAACATGTGGAAAAATAACATGGTAGAACAGATGCAGGAGGAT                                    | 43     | 6503                         | 6545 | sense    | 43         | 6                            |
| 135     | D                      | AACAGATACAGGAGGATATAATCAGTTTATGGGATCAAAGCCTAA                                  | 45     | 6529                         | 6573 | sense    | 43         | 1                            |

| Seq No. | Library <sup>(a)</sup> | Sequence (5' - 3')                                                                         | Length | Position HXB2 <sup>(b)</sup> |      | Polarity  | Contig No. | sncRNA # of identical clones |
|---------|------------------------|--------------------------------------------------------------------------------------------|--------|------------------------------|------|-----------|------------|------------------------------|
|         |                        |                                                                                            |        | Start                        | End  |           |            |                              |
| 136     | H                      | TAATCAGTTTATGGGATCAAAGCCTAAAGCCATGTGTAAAATTA                                               | 45     | 6547                         | 6591 | sense     | 43         | 5                            |
| 137     | G                      | AATCAGTTTATGGGATCAAAGCCTAAAGCCATGTGTAAAATTTACCCCACTCTGTGTTACTTTA                           | 64     | 6548                         | 6613 | sense     | 43         | 8                            |
| 138     | D                      | GTTTATGGGATCAAAGCCTAAAGCCATGTGTAAAATTAACCCCACTCTGTGTTA                                     | 54     | 6553                         | 6606 | sense     | 43         | 1                            |
| 139     | J                      | ACCCCACTCTGTGTTACTTTAAATTGCAAGGATGTG                                                       | 36     | 6591                         | 6626 | sense     | 43         | 2                            |
| 140     | F                      | CTCTGTGTTACTTTAAATTGCAAGGATGTGAATGCTACTAATA                                                | 43     | 6597                         | 6642 | sense     | 43         | 14                           |
| 141     | J                      | CTTTAAATTGCAAGGATGTGAATGCTACT                                                              | 29     | 6607                         | 6635 | sense     | 43         | 1                            |
| 142     | H                      | TTGCAATGATGTGAATGCTACTAATACCACTAGTGGTAGCGAGG                                               | 44     | 6614                         | 6660 | sense     | 43         | 1                            |
| 143     | J                      | GTGGTGATATTGAAAGAGCAGTTTTTATTTCT                                                           | 33     | 6712                         | 6680 | antisense | 44         | 4                            |
| 144     | J                      | AAC TTGATGTAGTACCAATAGGATAATAATAATACCAGCTATAGTTGATA                                        | 51     | 6757                         | 6807 | sense     | 45         | 1                            |
| 145     | A                      | CCCATACATTATTGTGCCCGGCTGGTTTTGCGATTCTAAAGTGAATG                                            | 49     | 6864                         | 6912 | sense     | 46         | 1                            |
| 146     | E                      | CATTATTGTGCCCGGCTGGTTTTGCGATT                                                              | 30     | 6870                         | 6899 | sense     | 46         | 5                            |
| 147     | D                      | CATTATTGTGCCCGGCTGGTTTTACGATTCTAAAGTG                                                      | 38     | 6870                         | 6907 | sense     | 46         | 4                            |
| 148     | C                      | CATTATTGTGCCCGGCTGGTTTTGCGATTCTAAAGTGAATG                                                  | 43     | 6870                         | 6912 | sense     | 46         | 1                            |
| 149     | A                      | CATTATTGTGCCCGGCTGGTTTTGCGATTCTAAAGTGAATGATAAGACGTT                                        | 53     | 6870                         | 6922 | sense     | 46         | 4                            |
| 150     | A                      | CCCCGGCTGGTTTTGCGATTCTAAAGTGAAT                                                            | 32     | 6880                         | 6911 | sense     | 46         | 6                            |
| 151     | C                      | TTCTAAAGTGAATGATAAGACCTTCAATGAAAAAGGACCATGTATTT                                            | 48     | 6898                         | 6945 | sense     | 46         | 1                            |
| 152     | J                      | TCTAAAGTGAATGATAAGACGTTCAATGAAAAAGG                                                        | 36     | 6899                         | 6934 | sense     | 46         | 3                            |
| 153     | C                      | ACAATGTACACATGGAATTAGGCCAGTAGTATCAACTCAACTGCTGCTAAATGGCAGTCTAGCAGA                         | 66     | 6959                         | 7024 | sense     | 47         | 4                            |
| 154     | G                      | AATTAGATCTGACAATTTACGAACAATGCTAAAACCA                                                      | 38     | 7037                         | 7074 | sense     | 48         | 2                            |
| 155     | C                      | ATTAGATCTGACAATTTACGAACAATGCTAA                                                            | 32     | 7038                         | 7069 | sense     | 48         | 1                            |
| 156     | E                      | AATTGTAATGCACAGTTTTAATTGTGGAGGAGAATTTTTCTACTGT                                             | 46     | 7334                         | 7379 | sense     | 49         | 1                            |
| 157     | J                      | AAC TTTAATAGTACTTGAATAATAACTGAAGGGTCAAATT                                                  | 45     | 7390                         | 7443 | sense     | 50         | 1                            |
| 158     | B                      | ATAAACATGTGGCAGGAAGTAGGAAAAAGCAATGTATG                                                     | 37     | 7494                         | 7530 | sense     | 51         | 2                            |
| 159     | H                      | CATGTGGCAGGAAGTAGGAAAAAGCAATGTATG                                                          | 32     | 7499                         | 7530 | sense     | 51         | 3                            |
| 160     | D                      | ATGTGGCAGGAAGTAGGAAAAAGCAATGTATG                                                           | 31     | 7500                         | 7530 | sense     | 51         | 1                            |
| 161     | J                      | ATGTGGCAGGAAGTAGGAAAAAGCGATGTATG                                                           | 31     | 7500                         | 7530 | sense     | 51         | 1                            |
| 162     | D                      | GACCTGGAGGAGGAGATATGAGGGACAAC TGGAGAAGTGA                                                  | 40     | 7630                         | 7669 | sense     | 52         | 6                            |
| 163     | C                      | ACCTGGAGGAGGAGATATGAGGGACAATTGGAGAAGTG                                                     | 38     | 7631                         | 7668 | sense     | 52         | 3                            |
| 164     | H                      | ACATCACTTCTCCAATTGCCCCCTCATATCT                                                            | 30     | 7672                         | 7643 | antisense | 52         | 1                            |
| 165     | E                      | CTATTATTGTCTGGTATAGTGCAACAGCAGAACAAATTTGCTGAGGGCTATTGAGGCGCAACAGCGTATGTTGCAACTCACAGTCTGGGG | 89     | 7851                         | 7939 | sense     | 53         | 1                            |
| 166     | D                      | CTCTGGAAAAC TCATTGCACTGCTGTGCCCTG                                                          | 36     | 8018                         | 8053 | sense     | 54         | 1                            |
| 167     | D                      | AAC TCATTGCACTGCTGTGCCCTTGAATGCTA                                                          | 36     | 8026                         | 8061 | sense     | 54         | 5                            |
| 168     | H                      | CTGCTGTGCCCTTGAATGCTAGTTGGAGTAATAATCTCTGGATA                                               | 45     | 8041                         | 8085 | sense     | 54         | 1                            |
| 169     | J                      | GATTTGGAATAACATGACCTGGATGGAGTGGGT                                                          | 33     | 8087                         | 8119 | sense     | 55         | 1                            |
| 170     | E                      | AACATGACCTGGATGGAGTAGAAAAAGAGAAATTGACAATTACACAAGCGAA                                       | 51     | 8097                         | 8147 | sense     | 55         | 1                            |
| 171     | J                      | TGACCTGGATGGAGTGGGAAAGAGAAATTTACAATTACACA                                                  | 41     | 8101                         | 8141 | sense     | 55         | 4                            |
| 172     | J                      | AACAAGAAATTATTGGAATTAGATAAATGGGCAAGTTTGTGGAATTGGTTTGACATA                                  | 56     | 8194                         | 8249 | sense     | 56         | 1                            |
| 173     | J                      | ATTGGAATTAGATAAATGGGCAAGTTTGTGGAATTGGTTTGACATA                                             | 46     | 8204                         | 8249 | sense     | 56         | 1                            |
| 174     | J                      | AGTTTGTGGAATTGGTTTGACATAACAAAATGGCTG                                                       | 36     | 8226                         | 8261 | sense     | 56         | 1                            |
| 175     | E                      | AGGCTTGATAGGTTTAAGAATAGTTTTTACTGTACTTTCTATAGTGAATAGAGTTAGGCAGGGATT                         | 67     | 8294                         | 8360 | sense     | 57         | 3                            |
| 176     | C                      | TAGTTTTTACTGTACTTTCTATAGTGAATAGAGTTAGGCAGGGATACTCACCATTATCGTTTCAGA                         | 66     | 8314                         | 8379 | sense     | 57         | 1                            |
| 177     | J                      | ATACTCACCATTATCGTTTCAGA                                                                    | 23     | 8357                         | 8379 | sense     | 57         | 2                            |
| 178     | H                      | CTCACCATTATCGTTTCAGA                                                                       | 20     | 8360                         | 8379 | sense     | 57         | 1                            |
| 179     | J                      | TCACCATTATCGTTTCAGA                                                                        | 19     | 8361                         | 8379 | sense     | 57         | 11                           |
| 180     | J                      | CCGTTCACTAATCGTTTCGGATCTGTCTGTCTCTCTCT                                                     | 39     | 8476                         | 8438 | antisense | 58         | 3                            |
| 181     | E                      | TAATCGTCCGATCTGTCTGTCTCTCT                                                                 | 29     | 8468                         | 8440 | antisense | 58         | 1                            |

| Seq No. | Library <sup>(a)</sup> | Sequence (5' - 3')                                                               | Length | Position HXB2 <sup>(b)</sup> |      | Polarity  | Contig No. | sncRNA # of identical clones |
|---------|------------------------|----------------------------------------------------------------------------------|--------|------------------------------|------|-----------|------------|------------------------------|
|         |                        |                                                                                  |        | Start                        | End  |           |            |                              |
| 182     | J                      | TTCATAATCGTCCGGATCTGTCTGTCTCTCT                                                  | 34     | 8473                         | 8440 | antisense | 58         | 1                            |
| 183     | E                      | CGTTCACTAATCGTCCGGATCTGTCTGTCTCTCT                                               | 36     | 8475                         | 8440 | antisense | 58         | 2                            |
| 184     | J                      | TTCATAATCGTCCGGATCTGTCTGTCTCTCT                                                  | 32     | 8473                         | 8442 | antisense | 58         | 1                            |
| 185     | H                      | CAGATCCGGACGATTAGTGAACGGATT                                                      | 27     | 8453                         | 8479 | sense     | 58         | 5                            |
| 186     | E                      | CACCTATCTGGGTCGACCTGCGGAGCCTGTG                                                  | 31     | 8485                         | 8515 | sense     | 59         | 6                            |
| 187     | H                      | ACTTATCTGGGTCGACCTGCGGAGCCTGTG                                                   | 30     | 8486                         | 8515 | sense     | 59         | 1                            |
| 188     | J                      | ACTTATCTGGGTCGACCTACGGAGCCTGTGCCTCTTCAGCTACCACCGCTTGAGAGACTTACTCTTGACTGTAACGAG   | 78     | 8486                         | 8563 | sense     | 59         | 1                            |
| 189     | C                      | CTCTTGACTGTAACGAGGATTGTGGAA                                                      | 27     | 8547                         | 8573 | sense     | 59         | 4                            |
| 190     | H                      | GATTGTGGAACCTTCTGGGACGCAGGGAGTGAGAAGTCTGAAATATCGGTGGG                            | 53     | 8564                         | 8616 | sense     | 59         | 1                            |
| 191     | G                      | CTTGCTCAATGCCACAGCCATA                                                           | 22     | 8663                         | 8684 | sense     | 60         | 2                            |
| 192     | J                      | CTTGCTCAATGCCACAGCCATAG                                                          | 23     | 8663                         | 8685 | sense     | 60         | 1                            |
| 193     | E                      | CAAAACGTAGTGTGCCTGGATGGTCTACTGTAAGGGA                                            | 37     | 8813                         | 8849 | sense     | 61         | 1                            |
| 194     | G                      | AAAACGTAGTGTGCCTGGATGGTCTACTGTAAGGGAAAG                                          | 39     | 8814                         | 8852 | sense     | 61         | 6                            |
| 195     | G                      | CAGGTCTCGAGATACTGCT                                                              | 19     | 8907                         | 8889 | antisense | 62         | 24                           |
| 196     | E                      | TTGCTCCGTGTTTTCCAGGTCTCGAGATACTGCT                                               | 35     | 8923                         | 8889 | antisense | 62         | 4                            |
| 197     | E                      | GATTGCTCCATGTTTTCCAGGTCTCGAGATACTGCT                                             | 37     | 8925                         | 8889 | antisense | 62         | 1                            |
| 198     | C                      | CGAGACCTGGAAAAACATGGAGCAATCACAAGTAGCAATACAGCAGCTACCAATGCTGATTGTGCCTGACTAGAAGCATA | 80     | 8899                         | 8978 | sense     | 62         | 2                            |
| 199     | B                      | AAGCACAGAGGATGAGGAGGTGGTTTTCCAGTCAGACCTCAGGTA                                    | 47     | 8972                         | 9018 | sense     | 62         | 12                           |
| 200     | C                      | CCAATGACTTACAAGGGAGCTGTAGATCTTAGCCACTTTTTAAAAGA                                  | 47     | 9028                         | 9074 | sense     | 63         | 1                            |
| 201     | F                      | CACACAAGGCTACTTCCCTGATTGGCAGAACTACACACAGGGCCAGGGGT                               | 51     | 9144                         | 9194 | sense     | 64         | 1                            |
| 202     | G                      | TGATTGGCAGAACTACACACCAGGGCCAGGAATCAGATTTCCATTGACCTTTGGATGGTGCT                   | 62     | 9162                         | 9223 | sense     | 64         | 16                           |
| 203     | E                      | CTACACACCAGGGCCAGGAATCAGATTCCATTGACCTTTGGATGGTGCTTCAAGCTAG                       | 59     | 9174                         | 9232 | sense     | 64         | 45                           |
| 204     | D                      | GATTTCCACTGACCTTTGGATGGTGCTTCAAGCTAGTACCAGTTGAGCCA                               | 50     | 9197                         | 9246 | sense     | 64         | 1                            |
| 205     | J                      | CATTGACCTTTGGATGGTGCTTCAAGCTAGTACCAGTTGAGCCA                                     | 44     | 9203                         | 9246 | sense     | 64         | 3                            |
| 206     | D                      | CTGACCTTTGGATGGTGCTTCAAGCTAGTACCAGTTGAG                                          | 39     | 9205                         | 9243 | sense     | 64         | 2                            |
| 207     | D                      | CTGACCTTTGGATGGTGCTTCAAGCTAGTACCAGTTGAGCCA                                       | 42     | 9205                         | 9246 | sense     | 64         | 3                            |
| 208     | G                      | AACAAGCAGTTGTTCTCTCCTT                                                           | 22     | 9290                         | 9269 | antisense | 65         | 14                           |
| 209     | D                      | GCTTGTTACACCCTATGAGCCAGCATGGGATGGGCGA                                            | 37     | 9284                         | 9320 | sense     | 65         | 1                            |
| 210     | D                      | GCTTGTTACACCCTATGAGCCAGCATGGGATGGACGACCCGGAGAGGGAA                               | 50     | 9284                         | 9333 | sense     | 65         | 7                            |
| 211     | E                      | ATGGGATAGAGGACCCGGAGAAGGAAGTGTTAGAGTGGAGGTTTGACAG                                | 49     | 9308                         | 9356 | sense     | 65         | 11                           |
| 212     | H                      | TCATCACGTGGCCCGAGAGCTGCATCCGGAGTACT                                              | 35     | 9369                         | 9403 | sense     | 66         | 2                            |
| 213     | C                      | TCACGCGGCCCGAGAGCTGCATCCGGAGTACTACAAGGA                                          | 39     | 9372                         | 9410 | sense     | 66         | 1                            |
| 214     | D                      | TCACGTGGCCCGAGAGCTGCATCCGGAGTACTACAAGGA                                          | 39     | 9372                         | 9410 | sense     | 66         | 45                           |
| 215     | C                      | CGCCTCCCTGGAAAGT                                                                 | 16     | 9467                         | 9452 | antisense | 67         | 1                            |
| 216     | H                      | CCTCCCGCGCAGGCCACG                                                               | 18     | 9483                         | 9466 | antisense | 67         | 1                            |

<sup>(a)</sup> libraries A, C, E, G, and J are derived from macrophages and libraries B, D, F, and H from CD4<sup>+</sup> T-lymphocytes

<sup>(b)</sup> positions of sncRNAs are based on the reference HIV-1 strain HXB2 (GenBank accession number K03455)