**Table S1**. The primer sequences for detected lncRNAs.

|  |  |  |
| --- | --- | --- |
| Gene | Forward primer (5’-3’) | Reverse primer (5’-3’) |
| Gm15521 | CAGCAAACACACTCCAAGCC | GGGACTATCAGGGGGACTGT |
| Gm4681 | TGGCCTCAGTCAGCTCATTC | CTCCCGTGGAAAGCTGAAGT |
| Gm13974 | TGCAGGGTTCTGAGTTTGGG | GCTGCCACCTACAGGCTAAA |
| GAPDH | AGACAGCCGCATCTTCTTGT | CTTGCCGTGGGTAGAGTCAT |

**Table S2.** Summary characteristics of lncRNA sequencing data.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sample | Raw reads | Clean reads | Clean bases | Error rate (%) | Q20 (%) | Q30 (%) | GC content (%) |
| Con\_1 | 94661078 | 94037522 | 11608610526 | 0.0241 | 98.34 | 95.09 | 47.87 |
| Con\_2 | 113755508 | 112966806 | 13828295608 | 0.0242 | 98.3 | 94.97 | 47.41 |
| Con\_3 | 99302020 | 98653702 | 12590214006 | 0.0244 | 98.24 | 94.83 | 47.6 |
| Con\_4 | 80011370 | 79484808 | 9887109616 | 0.0243 | 98.27 | 94.89 | 47.96 |
| Con\_5 | 91649290 | 91114532 | 11310980657 | 0.0241 | 98.35 | 95.06 | 47.86 |
| NTDs\_1 | 100885668 | 100110830 | 12671841056 | 0.0243 | 98.23 | 94.92 | 49.78 |
| NTDs\_2 | 91629708 | 90984588 | 11251366967 | 0.0244 | 98.2 | 94.85 | 49.72 |
| NTDs\_3 | 89939916 | 89346990 | 11119503587 | 0.0243 | 98.22 | 94.88 | 50.26 |
| NTDs\_4 | 93104112 | 92527992 | 11293295570 | 0.0241 | 98.34 | 95.05 | 48.2 |
| NTDs\_5 | 90664686 | 89994176 | 11137797224 | 0.0243 | 98.23 | 94.9 | 49.87 |

**Table S3**. Summary characteristics of RRBS data.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sample | Raw reads | Clean reads | Bases | Q20 (%) | Q30 (%) | GC (%) |
| Con\_1 | 18578003 | 18150203 | 5020552811 | 97.1 | 91.52 | 27.14 |
| Con\_2 | 22393965 | 22044245 | 6235504000 | 97.45 | 92.2 | 25.89 |
| Con\_3 | 15931738 | 15456252 | 4319181525 | 97.38 | 92.19 | 26.23 |
| Con\_4 | 16278835 | 15644969 | 4378852135 | 97.47 | 92.39 | 26.05 |
| Con\_5 | 19914157 | 19270151 | 5320305243 | 97.21 | 91.78 | 26.15 |
| NTDs\_1 | 20387575 | 19830132 | 5488828641 | 97.24 | 91.85 | 26.06 |
| NTDs\_2 | 19869177 | 19208685 | 5367735625 | 97.06 | 91.44 | 25.86 |
| NTDs\_3 | 19142181 | 18648882 | 5258888108 | 97.41 | 92.29 | 25.69 |
| NTDs\_4 | 18091311 | 17673961 | 4863223462 | 97.24 | 91.9 | 26.58 |
| NTDs\_5 | 17976619 | 17071996 | 4696254372 | 97.19 | 91.81 | 27.25 |