

Table S1. RNA-Seq mapping statistics.

| Sample | Barcode | Count | Filtered | Mapped | Unique |
|--------------------------|---------|-----------|----------|--------|--------|
| rna-46C-UN-CYT-PA-P1-10 | B01 | 10892931 | 84.6 | 35.9 | 25.5 |
| rna-46C-UN-CYT-PA-P1-60 | B03 | 15035117 | 84.3 | 24.2 | 18.0 |
| rna-46C-UN-CYT-PA-R3-10 | B04 | 13066238 | 89.7 | 47.4 | 34.7 |
| rna-46C-UN-NUC-PA-P1-60 | B06 | 28325017 | 93.9 | 24.0 | 20.4 |
| rna-46C-UN-NUC-PA-R3-10 | B07 | 14738890 | 94.7 | 45.3 | 38.6 |
| rna-46C-D5-CYT-PA-P1-10 | B08 | 11224434 | 86.7 | 39.6 | 30.2 |
| rna-46C-D5-CYT-PA-P1-60 | B09 | 17000168 | 87.5 | 25.0 | 19.7 |
| rna-46C-D5-CYT-PA-R3-10 | B10 | 21650624 | 91.6 | 48.3 | 37.7 |
| rna-46C-D5-NUC-PA-P1-10 | B11 | 15663022 | 94.1 | 47.1 | 42.3 |
| rna-46C-D5-NUC-PA-P1-60 | B12 | 24108732 | 94.6 | 34.7 | 31.2 |
| rna-46C-D5-NUC-PA-R3-10 | B13 | 15223650 | 81.5 | 40.2 | 37.3 |
| rna-KH2-UN-NUC-RM-R3-10 | B14 | 12475012 | 84.9 | 36.2 | 32.3 |
| rna-KH2-D5-NUC-RM-R3-10 | B15 | 14433434 | 96.4 | 53.1 | 48.0 |
| Onodera Project-Specific | B01-B13 | 186928823 | 90.2 | 36.5 | 30.1 |
| Total | all | 213837269 | 90.3 | 37.6 | 31.4 |

Mapping statistics for reads from RNA-Seq experiment. Sample, RNA library information; Barcode, barcode used for sequencing; Count, total number of reads returned; Filtered, percent of reads passing filter step; Mapped, percent of reads mapped singly or multiply; Unique, percent of reads mapped uniquely. Barcodes B14-B15 were part of a separate project and were not used in this study, but are presented here for completeness of run information. “UN” indicates our undifferentiated mESC libraries, while “D5” indicates our day 5 neural precursor libraries.