

| RNA Type | All mRNAs | | UCEs | | Enrichment ¹ | P | <u>Avg-Obs</u> [†] SD |
|-------------------|-----------|-------|--------|-------|-------------------------|--------|-----------------------------------|
| | Mbp | % | bp | % | | | |
| All exons | 80.14 | 8.46 | 34,374 | 26.66 | 3.15 | < 1E-6 | 16.35 |
| | All exons | | | | | | |
| | Mbp | % | | | | | |
| 5'UTR | 24.16 | 30.15 | 16,381 | 47.66 | 1.58 | < 1E-6 | 11.16 |
| Internal exon | 31.03 | 38.72 | 18,027 | 52.44 | 1.35 | < 1E-6 | 17.77 |
| 3'UTR | 42.20 | 52.66 | 21,148 | 61.52 | 1.17 | < 1E-6 | 5.82 |
| 5'UTR+internal | 7.14 | 8.92 | 9,140 | 26.59 | 2.98 | < 1E-6 | 21.47 |
| 3'UTR+internal | 8.55 | 10.67 | 9,816 | 28.56 | 2.68 | < 1E-6 | 18.80 |
| 5'UTR+3'UTR | 7.10 | 8.85 | 8,084 | 23.52 | 2.66 | < 1E-6 | 16.87 |
| 5'+3'UTR+int. | 3.24 | 4.04 | 5,144 | 14.96 | 3.70 | < 1E-6 | 23.31 |
| Cassette exon | 3.57 | 4.46 | 7,109 | 20.68 | 4.63 | < 1E-6 | 42.32 |
| 5'UTR+cassette | 0.85 | 1.06 | 3,673 | 10.67 | 10.07 | < 1E-6 | 42.84 |
| 3'UTR+cassette | 0.87 | 1.09 | 4,235 | 12.32 | 11.30 | < 1E-6 | 44.41 |
| 5'+3'UTR+cassette | 0.39 | 0.48 | 2,671 | 7.77 | 16.19 | < 1E-6 | 47.70 |
| → and ← | 9.96 | 12.44 | 5,889 | 17.13 | 1.37 | < 1E-6 | n/a |

Supplementary Table 2 Overlap of combined UCEs with exons. Number of bp and fraction of total bp of mRNA and UCEs contained in all exons, 5' UTRs, internal exons, 3' UTRs, the pairwise and three-way intersections of these three classes of exons, and exons transcribed in both directions (→ and ←). Also included are data for cassette exons, which are internal exons present in one mRNA but not another while their two flanking exons are present in both mRNAs. For UCEs that only partially overlap exons, only the exonic portions were considered. Total mRNA corresponded to 947 Mbp of sequence, and total genic^{tr} UCEs included 129 Kbp. ¹Enrichment: UCE fraction divided by fraction of all mRNAs. [†]Distance between expected average and observed overlap, in standard deviations from random trials.