Supplementary Table 3. Alternative splicing events.

Known AS events

| #Sample  | 3pMXE | 5pMXE | A3SS | A3SS&ES | A5SS | A5SS&ES | ES | IntronR | MXE | cassetteExon | Total | Detected junction AS/100SJ |
|----------|-------|-------|------|---------|------|---------|----|---------|-----|--------------|-------|---------------------------|
| CPEB3_1st | 416   | 1373  | 3565 | 323     | 4734 | 416     | 2019| 2009    | 179 | 1158         | 16192 | 188308                   |
| CPEB3_2nd | 388   | 1359  | 3420 | 296     | 4500 | 398     | 1949| 1978    | 186 | 1032         | 15506 | 178425                   |
| CPEB3_3rd | 440   | 1385  | 3634 | 293     | 4825 | 410     | 2074| 1963    | 203 | 1191         | 16418 | 199214                   |
| Ctrl_1st  | 380   | 1291  | 3283 | 280     | 4443 | 376     | 1930| 1979    | 165 | 1048         | 15175 | 178945                   |
| Ctrl_2nd  | 381   | 1276  | 3341 | 267     | 4542 | 384     | 1834| 1883    | 170 | 1011         | 15089 | 172304                   |
| Ctrl_3rd  | 365   | 1119  | 3334 | 275     | 4109 | 361     | 1829| 1890    | 171 | 966          | 14419 | 169493                   |
| Total     | 991   | 3102  | 8138 | 843     | 3885 | 4632    | 2032| 35128   | 11.26 |                         |       |                           |

Novel AS events

| Sample   | 3pMXE | 5pMXE | A3SS | A3SS&ES | A5SS | A5SS&ES | ES | IntronR | MXE | cassetteExon | Total | Detected junction AS/100SJ |
|----------|-------|-------|------|---------|------|---------|----|---------|-----|--------------|-------|---------------------------|
| Ctrl_1st | 735   | 1859  | 4468 | 510     | 5566 | 632     | 2264| 7407    | 273 | 959          | 24673 | 59714                    |
| Ctrl_2nd | 728   | 1857  | 4313 | 488     | 5613 | 593     | 1962| 6803    | 244 | 964          | 23565 | 57352                    |
| SRSF6_1st| 796   | 1933  | 4765 | 548     | 6353 | 678     | 2085| 7436    | 287 | 1115         | 25996 | 71257                    |
| SRSF6_2nd| 724   | 1955  | 5178 | 585     | 6504 | 657     | 2361| 6885    | 325 | 1188         | 26362 | 77410                    |
| Total    | 1982  | 4606  | 12609| 1539    | 15249| 1769    | 5379| 15388   | 790 | 2684         | 61995 | 167859                   |

All AS events

| #Sample  | 3pMXE | 5pMXE | A3SS | A3SS&ES | A5SS | A5SS&ES | ES | IntronR | MXE | cassetteExon | Total | Detected junction AS/100SJ |
|----------|-------|-------|------|---------|------|---------|----|---------|-----|--------------|-------|---------------------------|
| Ctrl_1st | 1037  | 2443  | 7283 | 821     | 8777 | 1040    | 4495| 8522    | 273 | 959          | 24673 | 59714                    |
| Ctrl_2nd | 1040  | 2424  | 7194 | 815     | 8932 | 1032    | 4169| 7955    | 256 | 964          | 23565 | 57352                    |
| SRSF6_1st| 1111  | 2549  | 7705 | 884     | 9876 | 1108    | 4408| 8592    | 574 | 1115         | 25996 | 71257                    |
| SRSF6_2nd| 1053  | 2573  | 8200 | 920     | 10070| 1099    | 4778| 8045    | 605 | 1188         | 26362 | 77410                    |
| Total    | 2461  | 5485  | 16857| 2013    | 20314| 2389    | 8571| 17014   | 1269| 3026         | 81399 | 326115                   |

Supplementary Table 4. CPEB3-OE versus Ctrl differential ASs (RAS).

| Sample     | Type  | 3pMXE | 5pMXE | A3SS | A3SS&ES | A5SS | A5SS&ES | ES | IntronR | MXE | cassetteExon | Total | Detected junction AS/100SJ |
|------------|-------|-------|-------|------|---------|------|---------|----|---------|-----|--------------|-------|---------------------------|
| CPEB3_vs_Ctrl | Up    | 4     | 13    | 60   | 2       | 71   | 3       | 39 | 48      | 6   | 22           | 268   |                           |
| CPEB3_vs_Ctrl | Down  | 9     | 13    | 44   | 2       | 65   | 3       | 33 | 34      | 5   | 21           | 229   |                           |