

**Supplemental Table 4: Target Site Characteristics of De Novo L1 Insertions**

| Insertion #                | Target Site Genomic Location                        | Target-Site GC Content |            |
|----------------------------|---|------------------------|------------|
|                            |   | 50 bp                  | 20 kb      |
| 1                          | intergenic; repeat (Lx10)                           | 28%                    | 46%        |
| 2                          | intergenic  | 26%                    | 37%        |
| 3                          | intergenic  | 31%                    | 37%        |
| 4                          | intergenic  | 26%                    | 37%        |
| 5                          | intronic ( <i>ano4</i> , antisense); repeat (L1mA5) | 22%                    | 38%        |
| 6                          | intergenic  | 28%                    | 36%        |
| 7                          | intergenic; repeat (L1mus4)                         | 43%                    | 41%        |
| 8                          | intergenic  | 31%                    | 37%        |
| 9                          | intergenic  | 29%                    | 40%        |
| 10                         | intergenic  | 28%                    | 35%        |
| 11                         | intergenic  | 33%                    | 38%        |
| <b>average GC content:</b> |   | <b>30%</b>             | <b>38%</b> |

**Supplemental Table 4. Target site characteristics of *de novo* L1 insertions.** For each insertion, the target site type (intergenic, intronic, exonic) and whether the insertion occurred within an existing repeat sequence is indicated. The percent GC content of the insertion site, within a 50bp window and a 20kb window of the endonuclease cleavage site, is indicated.