**Table S1. Summary of exome sequencing on 19 probands with FMS.** Nineteen probands (FMS512 was sequenced twice) were subjected to exome sequence analysis. Total reads, total mapped reads, total yields, the percent coding exon >5X coverage, total SNPs and concordance with dbsNP134 are reported.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Proband\_ID | Total Reads (Millions) | Mapped Reads (Millions) | % Mapped Reads | Total Yields (Gbp) | Coding Exon Coverage (> 5X) | Median Coding Exon Coverage | Total SNP No. | Concordance with dbSNP134 |
| FMS104 | 56.2 | 35.7 | 63.50% | 2,856 | 82.4% | 25.3 | 83,352 | 95.50% |
| FMS127 | 55.7 | 39.6 | 71.10% | 3,168 | 80.4% | 36.2 | 45,808 | 97.20% |
| FMS321 | 53 | 37.4 | 70.60% | 2,992 | 80.1% | 34.4 | 52,543 | 96.60% |
| FMS340 | 54.6 | 34.8 | 63.70% | 2,784 | 82.3% | 24.4 | 82,763 | 95.90% |
| FMS45 | 31.7 | 25.8 | 81.40% | 2,064 | 77.3% | 23.3 | 48,375 | 96.80% |
| FMS483 | 99 | 42.5 | 42.90% | 3,400 | 79.4% | 19.9 | 321,466 | 92.80% |
| FMS495 | 53.6 | 41.5 | 77.40% | 3,320 | 77.8% | 31.0 | 59,678 | 96.70% |
| FMS501 | 59.5 | 43.8 | 73.60% | 3,504 | 77.4% | 37.1 | 58,879 | 96.80% |
| FMS51 | 32.3 | 26.6 | 82.40% | 2,128 | 81.2% | 23.4 | 53,613 | 96.50% |
| FMS512 | 63.5 | 44.1 | 69.40% | 3,528 | 81.3% | 40.9 | 48,477 | 96.90% |
| FMS512 | 55.9 | 38 | 68.00% | 3,040 | 77.4% | 35.6 | 56,564 | 96.30% |
| FMS53 | 51.5 | 38.1 | 74.00% | 3,048 | 80.1% | 35.1 | 50,363 | 97.10% |
| FMS540 | 60.3 | 44.8 | 74.30% | 3,584 | 81.2% | 40.9 | 70,195 | 96.00% |
| FMS549 | 59 | 42.1 | 71.40% | 3,368 | 78.0% | 41.2 | 55,266 | 96.60% |
| FMS65 | 127.7 | 30.4 | 23.80% | 2,432 | 78.6% | 26.6 | 102,392 | 94.90% |
| FMS68 | 132.8 | 59.8 | 45.00% | 4,784 | 83.5% | 44.5 | 107,252 | 97.10% |
| FMS76 | 133.1 | 63.6 | 47.80% | 5,088 | 85.0% | 51.4 | 105,526 | 97.10% |
| FMS82 | 49.9 | 28.8 | 57.70% | 2,304 | 68.4% | 15.9 | 75,653 | 95.40% |
| FMS97 | 53.6 | 32.1 | 59.90% | 2,568 | 81.7% | 22.1 | 92,751 | 95.70% |
| FMS99 | 53.8 | 32.9 | 61.20% | 2,632 | 81.1% | 21.9 | 83,854 | 95.30% |