# Depth of Coverage Stats for Exome capture, V3 flow cells.

Based on coverage stats for samples run as of 9/30/12

Assumptions:

* 32 GB yield per lane, PF, after de-multiplexing
* Equal sample pooling.

Notes:

32 GB per lane yield is a conservative estimate. Typical pooling variation should be compensated by typically higher yields. In other words, for a typical run we should be able to ignore pooling variation. If a run has low yield AND high pooling variation we will likely have samples miss these estimates.

## Summary of All Captures

|  |  |  |
| --- | --- | --- |
| Capture | Desired Coverage | Max # samples / lane |
| SureSelect V3 | 30X | 10 |
|  | 50X | 6 |
|  | 75X | 4 |
| SureSelect V4 | 30X | 10 |
|  | 50X | 7 |
|  | 75X | 5 |
| SureSelect V4+utr | 30X | 8 |
|  | 50X | 5 |
|  | 75X | 3 |
| TruSeq | 30X | 6 |
|  | 50X | 1 x 6 per lane + 1 x 12 per lane 12 samples = 3 lanes  24 samples = 6 lanes |
|  | 75X | 2 X 6 per lane |

## Details by Capture

**SureSelect V3**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Samples / Lane** | **Mean Coverage** | **Mean Coverage No Dupes** | **Median Coverage** | **Median Coverage No Dupes** | **% bases**  **>10x** | **% bases**  **>20x** | **% bases**  **>10x**  **No Dupes** | **% bases >20x**  **No Dupes** |
| 2 | 157 | 144 | 128 | 118 | 93 | 89 | 93 | 89 |
| 3 | 105 | 96 | 85 | 79 | 91 | 86 | 91 | 86 |
| 4 | 78 | 72 | 64 | 59 | 88 | 81 | 87 | 80 |
| 5 | 63 | 58 | 51 | 47 | 85 | 76 | 84 | 74 |
| 6 | 52 | 48 | 43 | 39 | 83 | 71 | 81 | 69 |
| 7 | 45 | 41 | 37 | 34 | 81 | 67 | 79 | 64 |
| 8 | 39 | 36 | 32 | 30 | 80 | 64 | 78 | 61 |
| 10 | 31 | 29 | 26 | 24 | 77 | 59 | 75 | 55 |

**SureSelect V4**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Samples / Lane** | **Mean Coverage** | **Mean Coverage No Dupes** | **Median Coverage** | **Median Coverage No Dupes** | **% bases**  **>10x** | **% bases**  **>20x** | **% bases**  **>10x**  **No Dupes** | **% bases >20x**  **No Dupes** |
| 2 | 185x | 168 | 147 | 133 | 98 | 96 | 98 | 95 |
| 3 | 125x | 112 | 98 | 89 | 98 | 95 | 98 | 94 |
| 4 | 94x | 84 | 74 | 66 | 97 | 92 | 97 | 91 |
| 5 | 78x | 67 | 59 | 53 | 96 | 88 | 95 | 87 |
| 6 | 62x | 56 | 49 | 44 | 94 | 83 | 94 | 82 |
| 7 | 54x | 48 | 42 | 38 | 92 | 80 | 92 | 79 |
| 8 | 44x | 42 | 37 | 33 | 91 | 75 | 90 | 74 |
| 10 | 38x | 34 | 29 | 27 | 89 | 71 | 89 | 70 |

**SureSelect V4+utr**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Samples / Lane** | **Mean Coverage** | **Mean Coverage No Dupes** | **Median Coverage** | **Median Coverage No Dupes** | **% bases**  **>10x** | **% bases**  **>20x** | **% bases**  **>10x**  **No Dupes** | **% bases >20x**  **No Dupes** |
| 2 | 146 | 133 | 117 | 107 | 98 | 96 | 98 | 95 |
| 3 | 97 | 88 | 78 | 71 | 97 | 92 | 97 | 91 |
| 4 | 73x | 66 | 58 | 54 | 94 | 87 | 94 | 86 |
| 5 | 58x | 53 | 47 | 43 | 92 | 81 | 92 | 80 |
| 6 | 49x | 44 | 39 | 36 | 89 | 75 | 89 | 74 |
| 7 | 42x | 38 | 33 | 31 | 87 | 70 | 87 | 69 |
| 8 | 36x | 33 | 29 | 27 | 88 | 66 | 85 | 65 |
| 10 | 29x | 27 | 23 | 21 | 82 | 60 | 82 | 59 |

**TruSeq**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Samples / Lane** | **Mean Coverage** | **Mean Coverage No Dupes** | **Median Coverage** | **Median Coverage No Dupes** | **% bases**  **>10x** | **% bases**  **>20x** | **% bases**  **>10x**  **No Dupes** | **% bases >20x**  **No Dupes** |
| 6 | 41 | 39 | 40 | 38 | 89 | 76 | 88 | 75 |
| 12 | 21 | 19 | 20 | 19 | 68 | 40 | 67 | 39 |