

# P3LC\_BWaseMeDip Report

methy1QA\* version 0.1.6 (r040)

September 3, 2016

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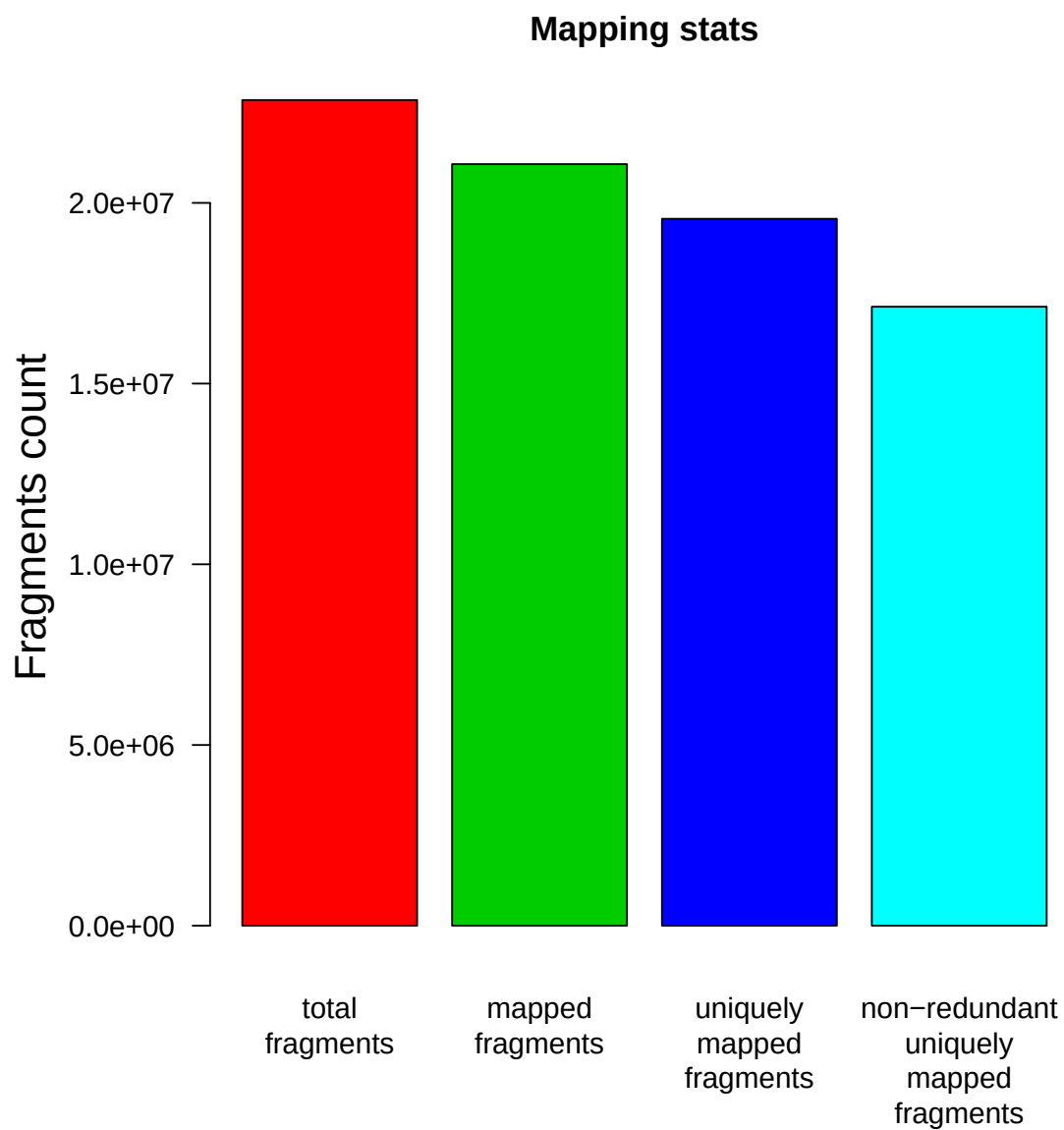
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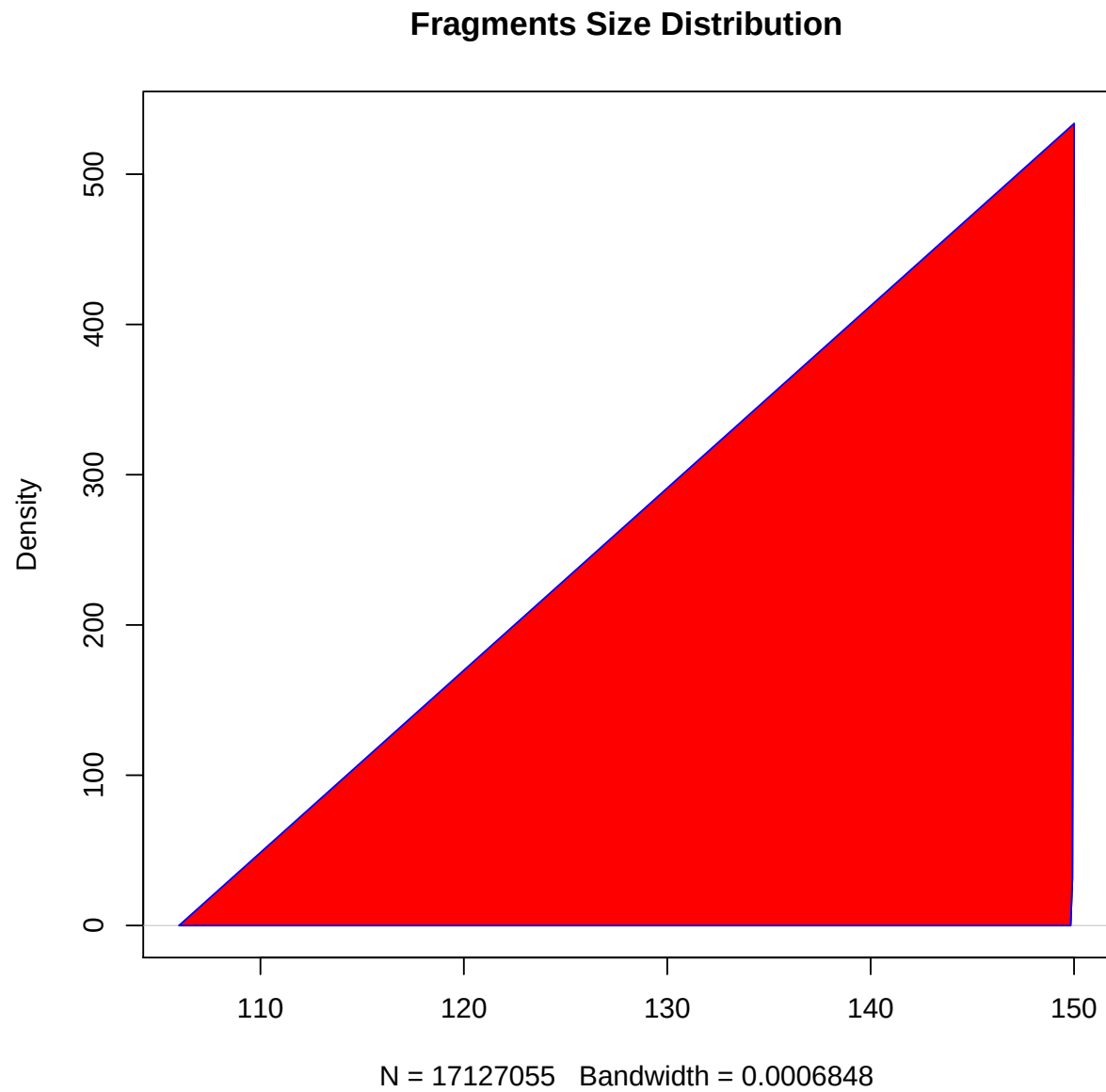
\*Website: <http://methy1QA.sourceforge.net/>

# 1 Mapping status

|                                         |          |
|-----------------------------------------|----------|
| total fragments                         | 22845934 |
| mapped fragments                        | 21072831 |
| uniquely mapped fragments               | 19560361 |
| non-redundant uniquely mapped fragments | 17127055 |

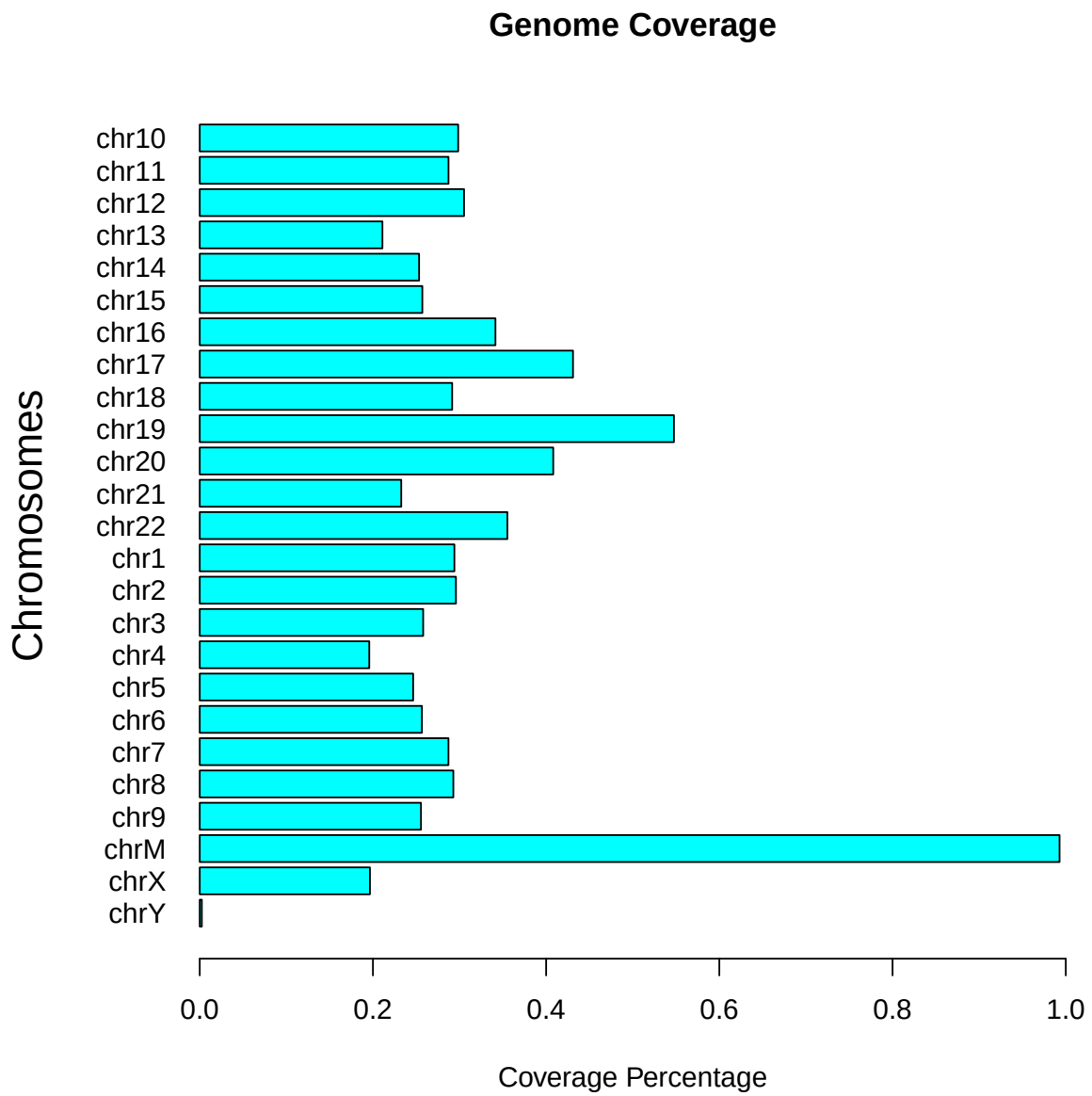


## 2 Fragments size distribution



### 3 Genomic coverage

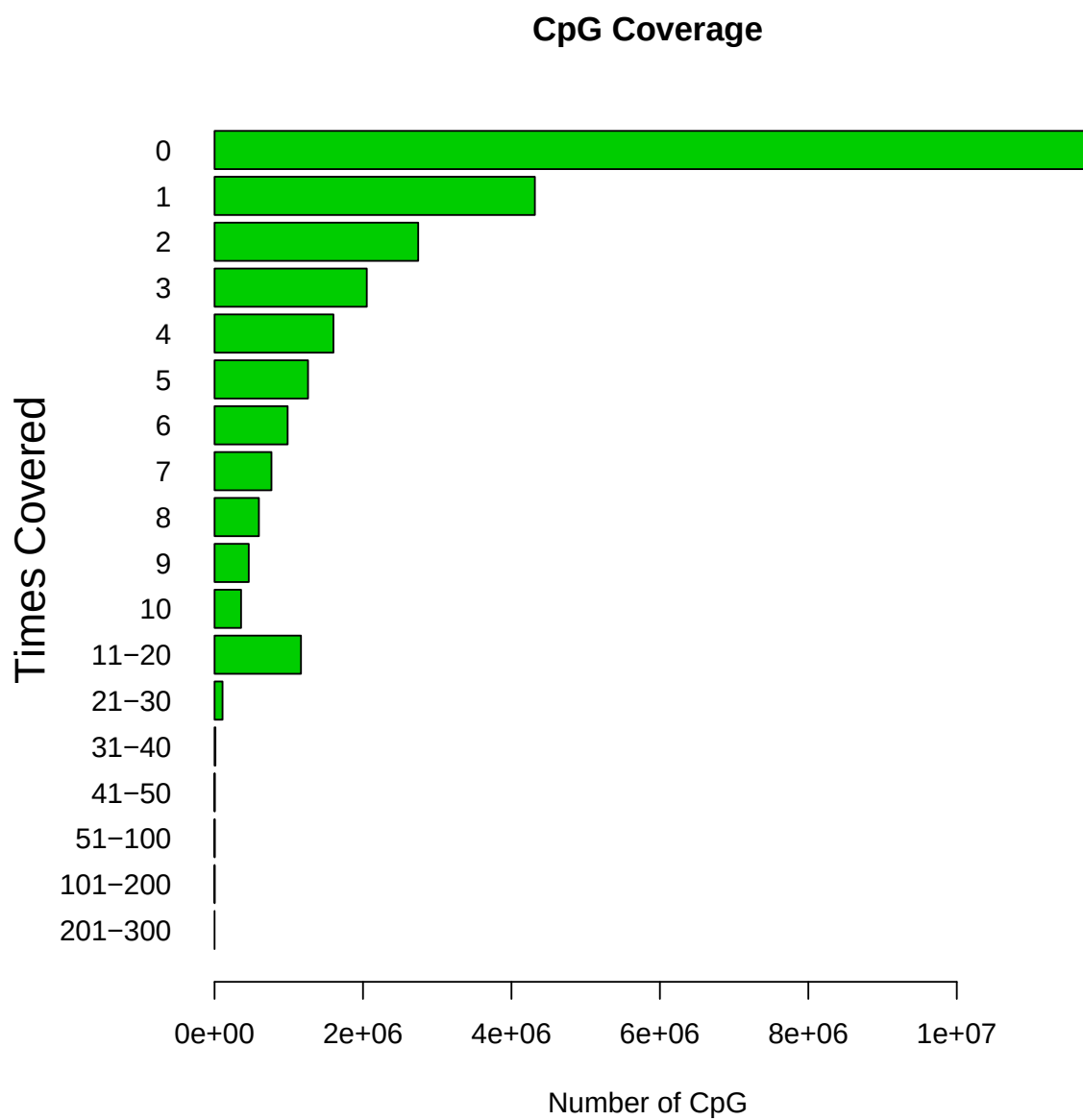
| chromosome   | total base | covered base | covered percentage |
|--------------|------------|--------------|--------------------|
| chr10        | 135534747  | 40448364     | 29.84%             |
| chr11        | 135006516  | 38780725     | 28.73%             |
| chr12        | 133851895  | 40853201     | 30.52%             |
| chr13        | 115169878  | 24297254     | 21.10%             |
| chr14        | 107349540  | 27189526     | 25.33%             |
| chr15        | 102531392  | 26352904     | 25.70%             |
| chr16        | 90354753   | 30853735     | 34.15%             |
| chr17        | 81195210   | 34996634     | 43.10%             |
| chr18        | 78077248   | 22755811     | 29.15%             |
| chr19        | 59128983   | 32374910     | 54.75%             |
| chr20        | 63025520   | 25725668     | 40.82%             |
| chr21        | 48129895   | 11198936     | 23.27%             |
| chr22        | 51304566   | 18226072     | 35.53%             |
| chr1         | 249250621  | 73290996     | 29.40%             |
| chr2         | 243199373  | 71941455     | 29.58%             |
| chr3         | 198022430  | 51088130     | 25.80%             |
| chr4         | 191154276  | 37419980     | 19.58%             |
| chr5         | 180915260  | 44585511     | 24.64%             |
| chr6         | 171115067  | 43898025     | 25.65%             |
| chr7         | 159138663  | 45702893     | 28.72%             |
| chr8         | 146364022  | 42858644     | 29.28%             |
| chr9         | 141213431  | 36071256     | 25.54%             |
| chrM         | 16571      | 16452        | 99.28%             |
| chrX         | 155270560  | 30513706     | 19.65%             |
| chrY         | 59373566   | 144459       | 0.24%              |
| Whole Genome | 3095693983 | 851585247    | 27.51%             |



## 4 CpG status

### 4.1 CpG coverage

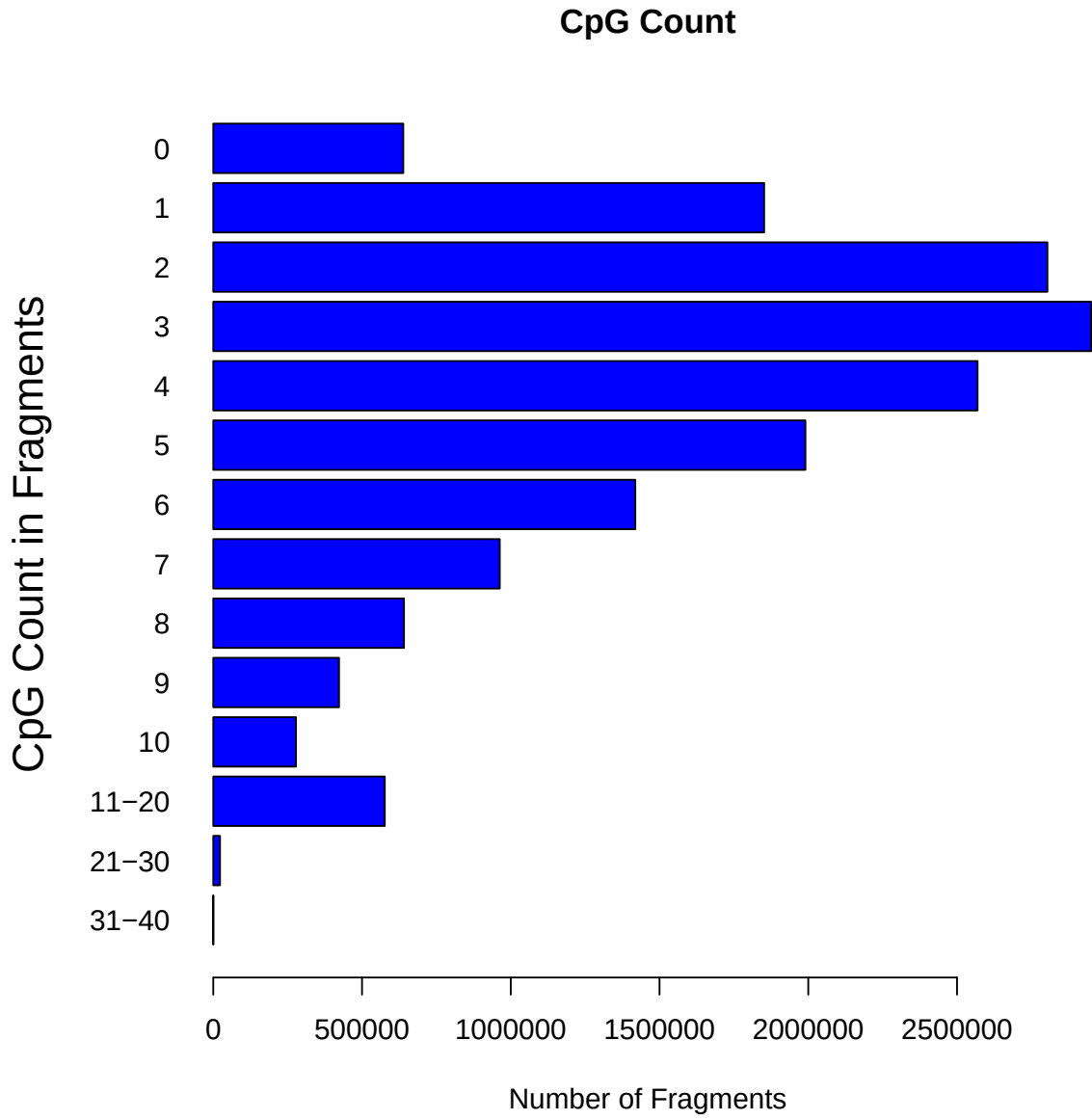
| Range   | Count    |
|---------|----------|
| 0       | 11792931 |
| 1       | 4315460  |
| 2       | 2743587  |
| 3       | 2050817  |
| 4       | 1601704  |
| 5       | 1259417  |
| 6       | 984530   |
| 7       | 766524   |
| 8       | 597148   |
| 9       | 460559   |
| 10      | 357190   |
| 11-20   | 1164290  |
| 21-30   | 107388   |
| 31-40   | 11527    |
| 41-50   | 1962     |
| 51-100  | 1738     |
| 101-200 | 618      |
| 201-300 | 58       |



## 4.2 CpG count

| Range | Count   |
|-------|---------|
| 0     | 638735  |
| 1     | 1851674 |
| 2     | 2803806 |
| 3     | 2950832 |
| 4     | 2568934 |
| 5     | 1990370 |
| 6     | 1418531 |
| 7     | 962955  |
| 8     | 641019  |
| 9     | 422757  |
| 10    | 278040  |
| 11-20 | 576494  |
| 21-30 | 22714   |
| 31-40 | 194     |





## 5 CpG enrichment

$$\begin{aligned}
 \text{CpG enrichment} &= \frac{\text{CpG count in fragments} / \text{total base of fragments}}{\text{CpG count in genome} / \text{total base of genome}} \\
 &= \frac{71577393 / 2569058005}{28217448 / 3095693983}
 \end{aligned}$$

$$= 3.06$$