P2LC_MRE Report

methylQA* version 0.1.6 (r040)

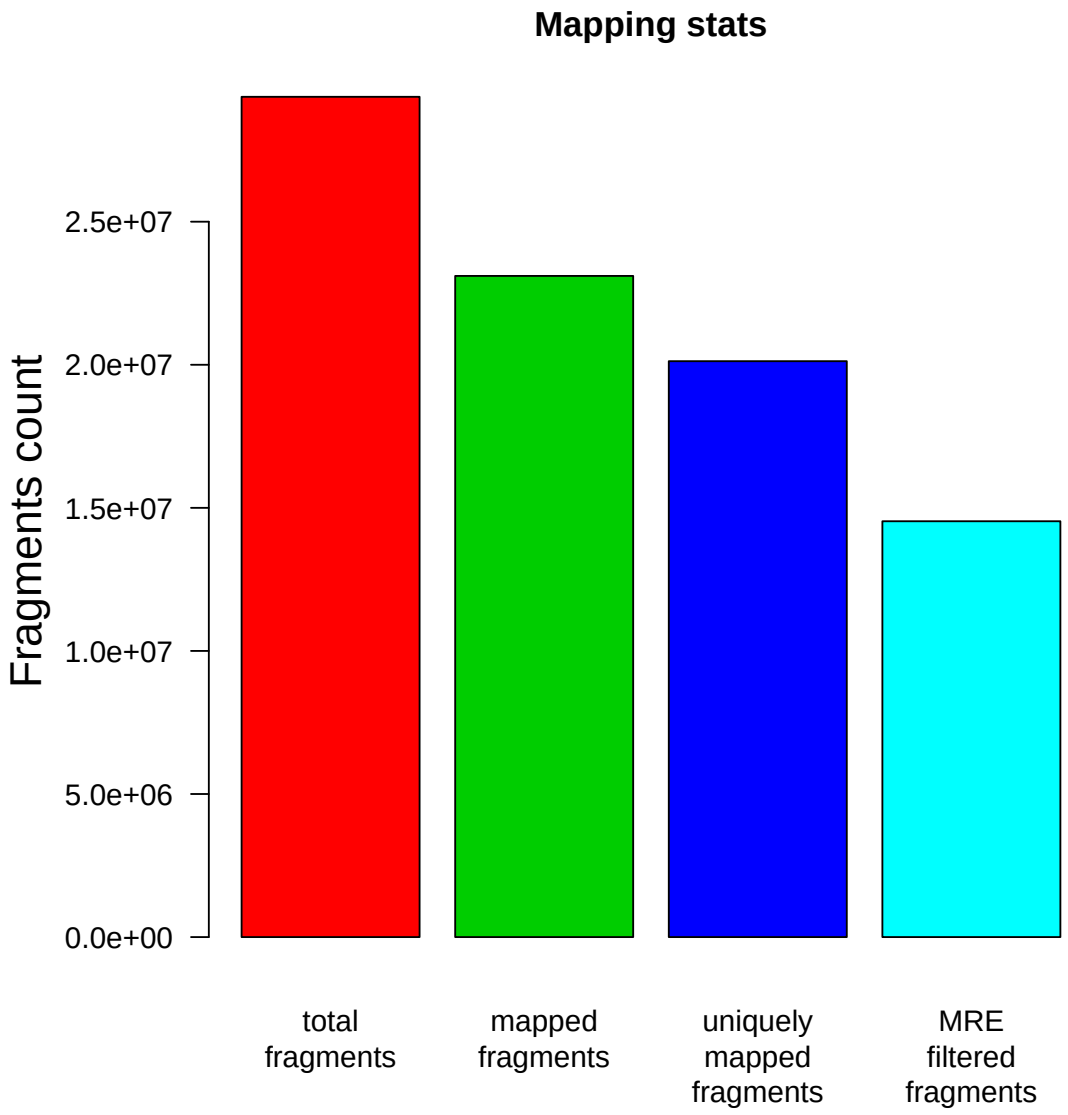
September 2, 2016

Contents

*Website: `http://methylQA.sourceforge.net/`

1 Mapping status

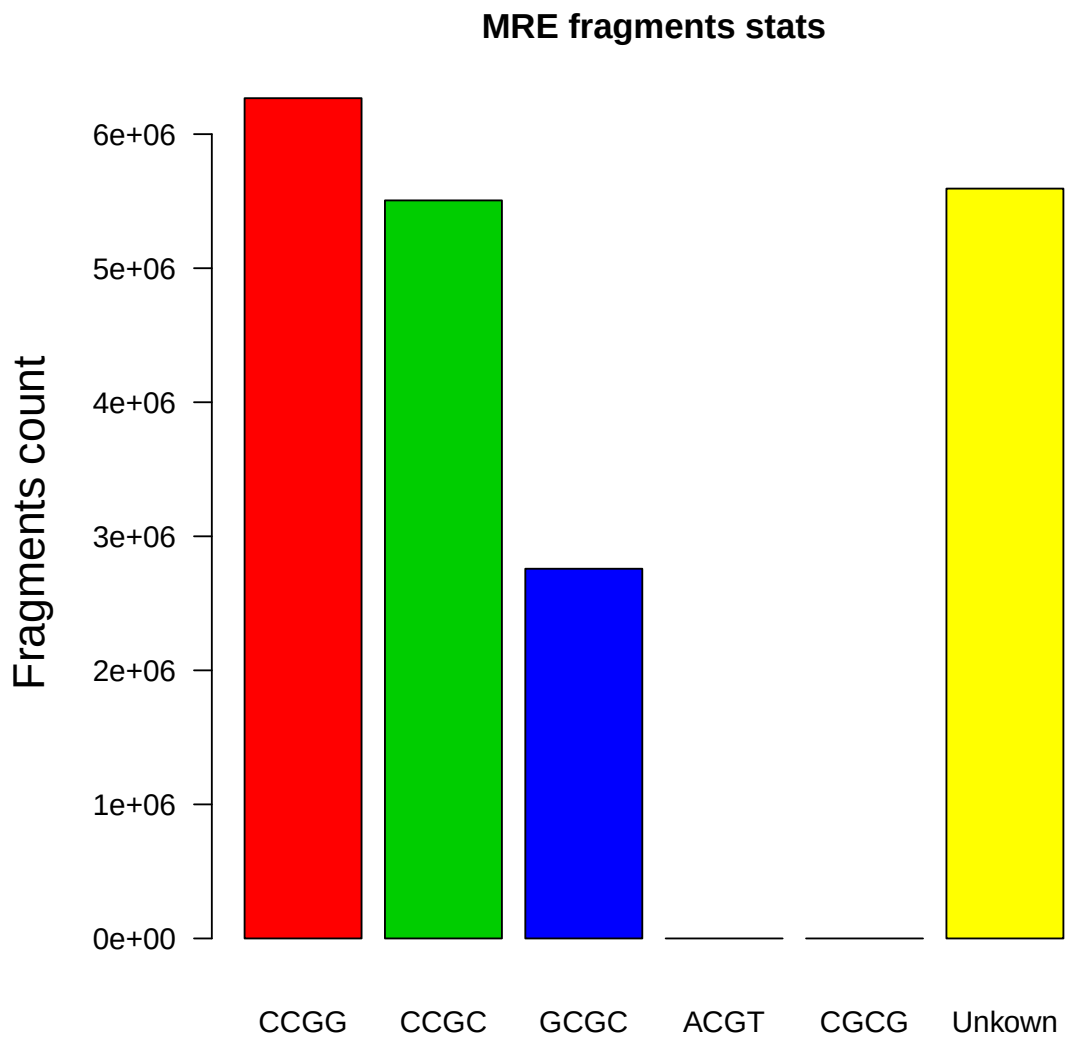
total fragments	29364204
mapped fragments	23105594
uniquely mapped fragments	20126067
MRE filtered fragments	14532111



2 MRE fragments stats

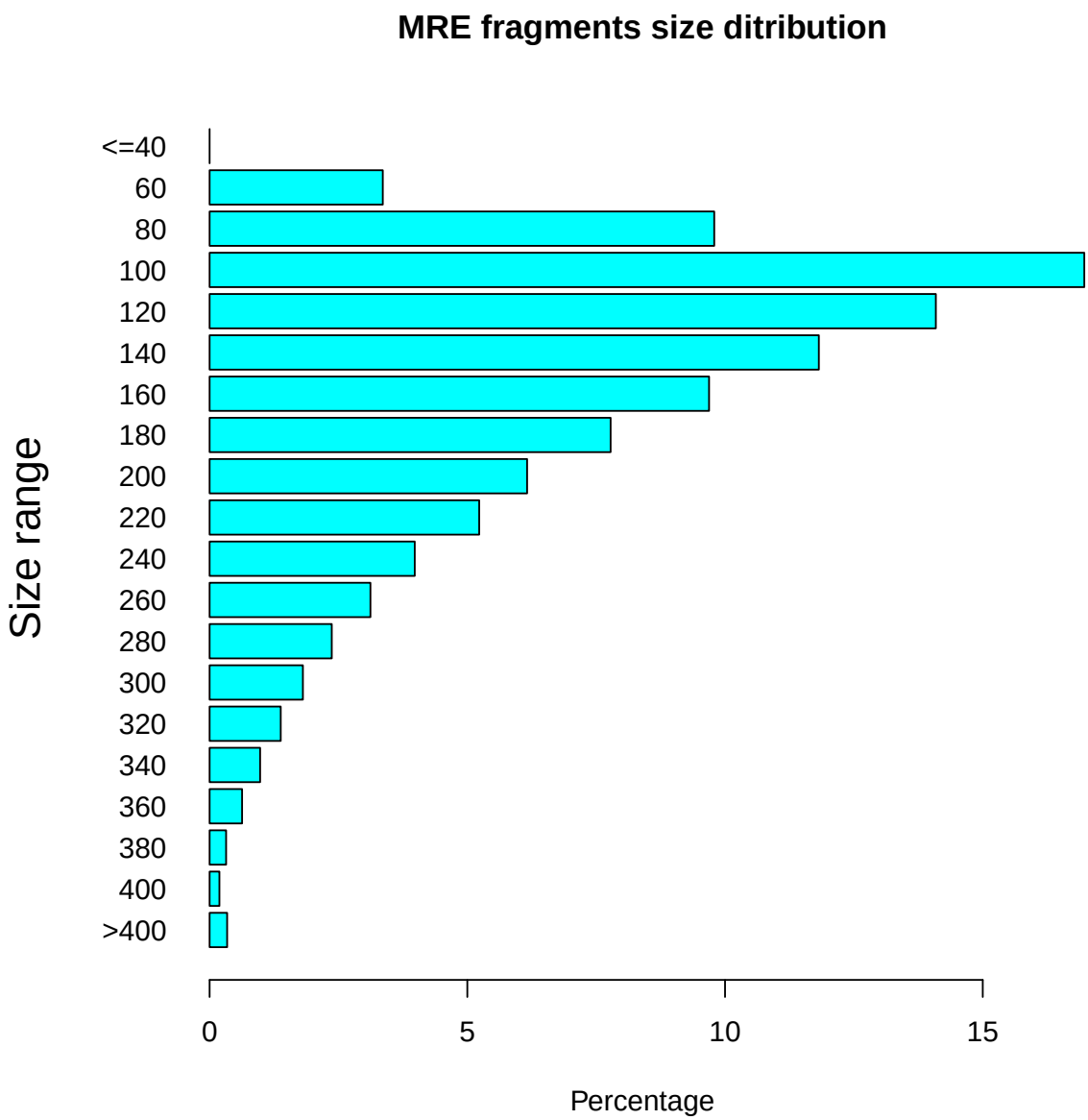
2.1 Distribution by enzyme cut site

Cut site	Count
CCGG	6268287
CCGC	5505806
GCGC	2758018
ACGT	0
CGCG	0
Unkown	5593956


MRE fragments stats
Fragments count
6e+06
5e+06
4e+06
3e+06
2e+06
1e+06
0e+00
CCGG
CCGC
GCGC
ACGT
CGCG
Unkown

2.2 Distribution by fragment size

Range	Percentage
≤40	0.00%
60	3.36%
80	9.79%
100	16.97%
120	14.09%
140	11.82%
160	9.69%
180	7.78%
200	6.16%
220	5.23%
240	3.98%
260	3.12%
280	2.37%
300	1.81%
320	1.38%
340	0.98%
360	0.63%
380	0.32%
400	0.19%
>400	0.34%



3 Sampled CpG sites

Total 1419150 CpG sites (5.03%) have been sampled in this dataset.

4 CpG enrichment

$$
\begin{aligned}
CpG\ enrichment &= \frac{CpG\ count\ in\ fragments \Big/ total\ base\ of\ fragments}{CpG\ count\ in\ genome \Big/ total\ base\ of\ genome} \\
&= \frac{67004388 \Big/ 1006301043}{28217448 \Big/ 3095693983} \\
&= \mathbf{7.30}
\end{aligned}
$$