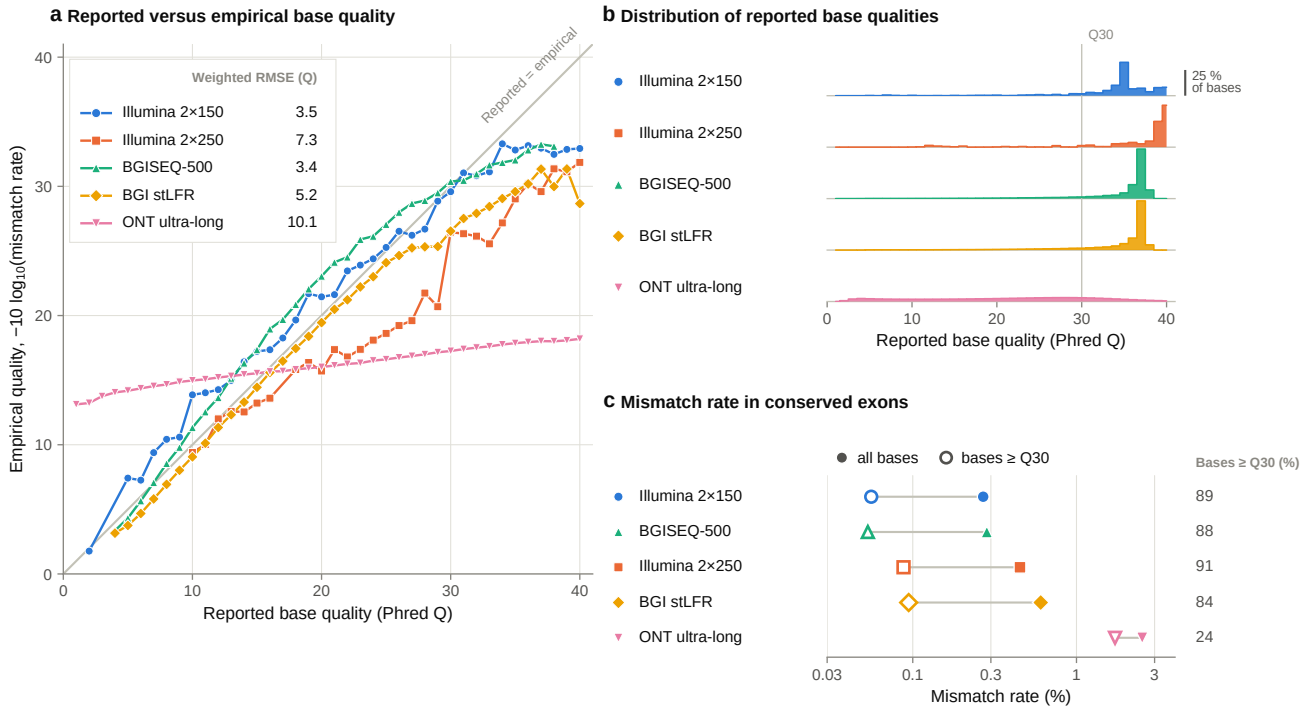
a Reported versus empirical base quality
Weighted RMSE (Q)
Illumina 2×150 3.5
Illumina 2×250 7.3
BGISEQ-500 3.4
BGI stLFR 5.2
ONT ultra-long 10.1
Reported = empirical
Empirical quality, −10 log10(mismatch rate)
Reported base quality (Phred Q)
b Distribution of reported base qualities
Illumina 2×150
Illumina 2×250
BGISEQ-500
BGI stLFR
ONT ultra-long
Q30
25 % of bases
Reported base quality (Phred Q)
c Mismatch rate in conserved exons
all bases
bases ≥ Q30
Bases ≥ Q30 (%)
89
88
91
84
24
Mismatch rate (%)