

## **Infinium Monkeys: Infinium 450K array for the *Cynomolgus macaque* (*Macaca fascicularis*)**

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GSE IDs: GSE52944 (Infinium 450K data), GSE53596 (RRBS data)

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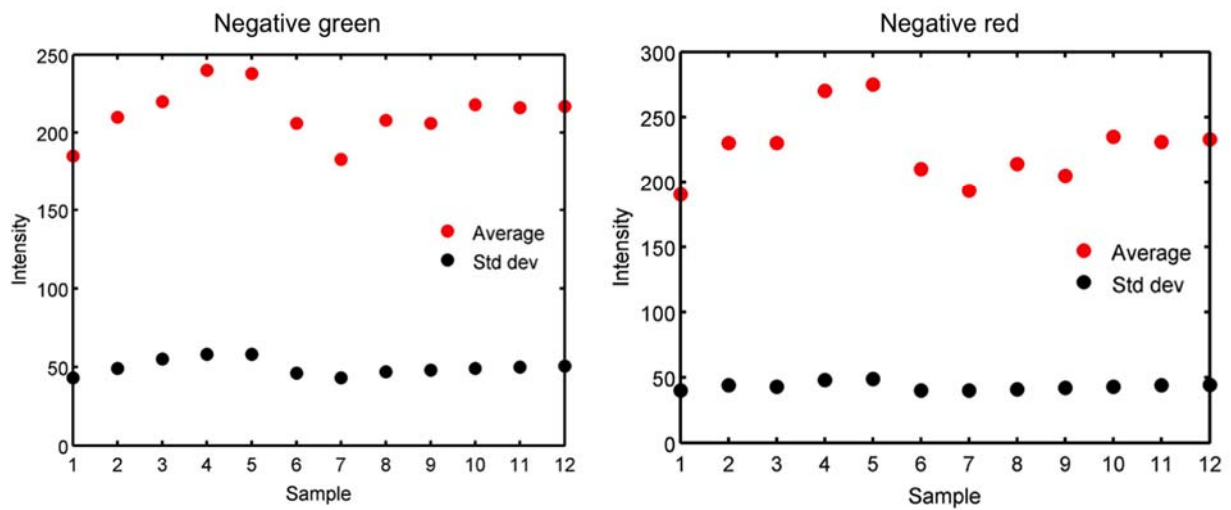
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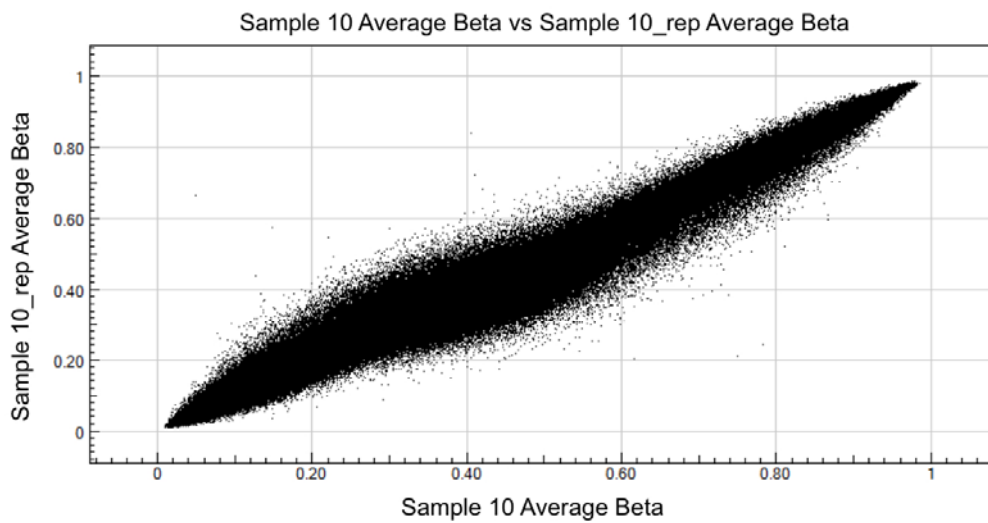
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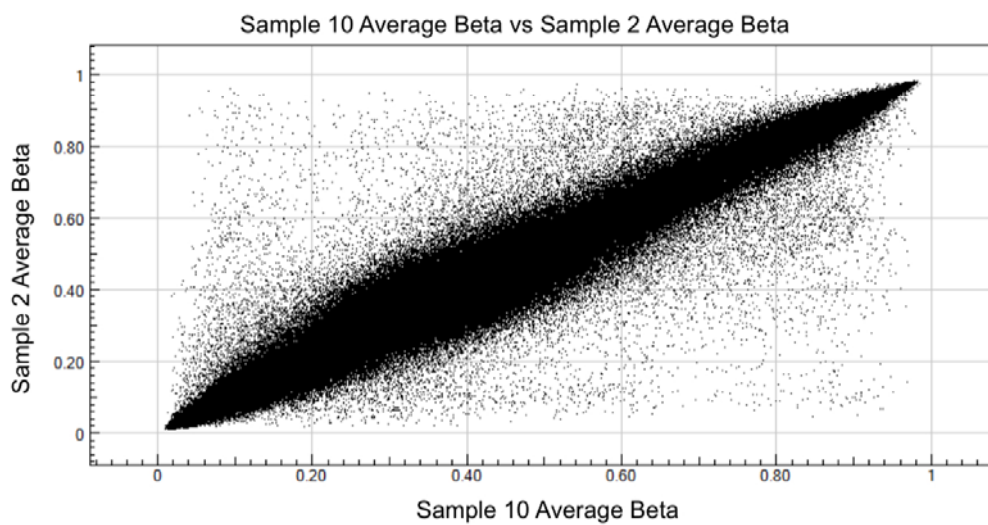
**Figure S1** (a) Average green and red negative control probe intensities with standard deviations for the twelve Infinium 450K data for the *Cynomolgus* macaque muscle tissues.

a



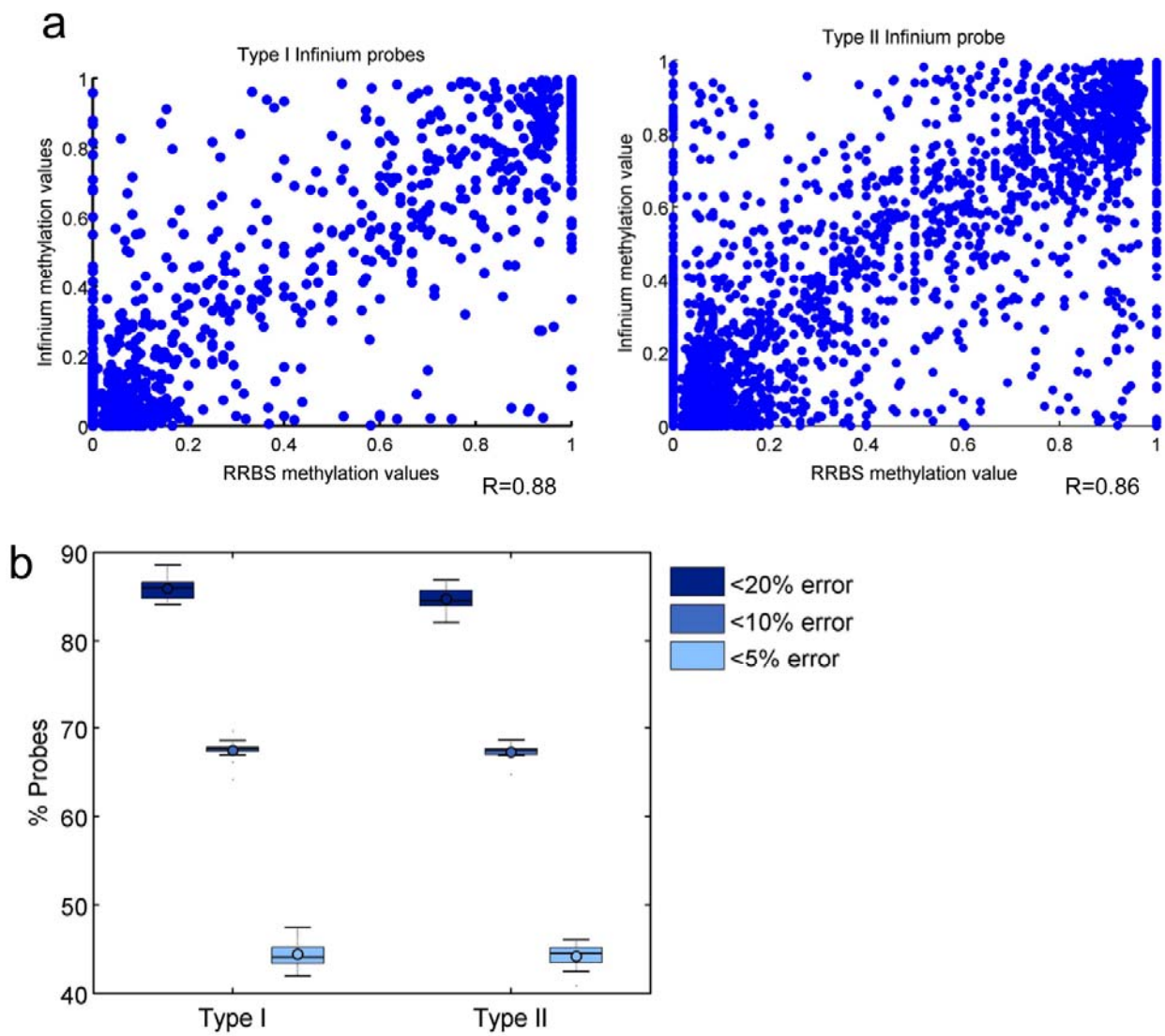
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b

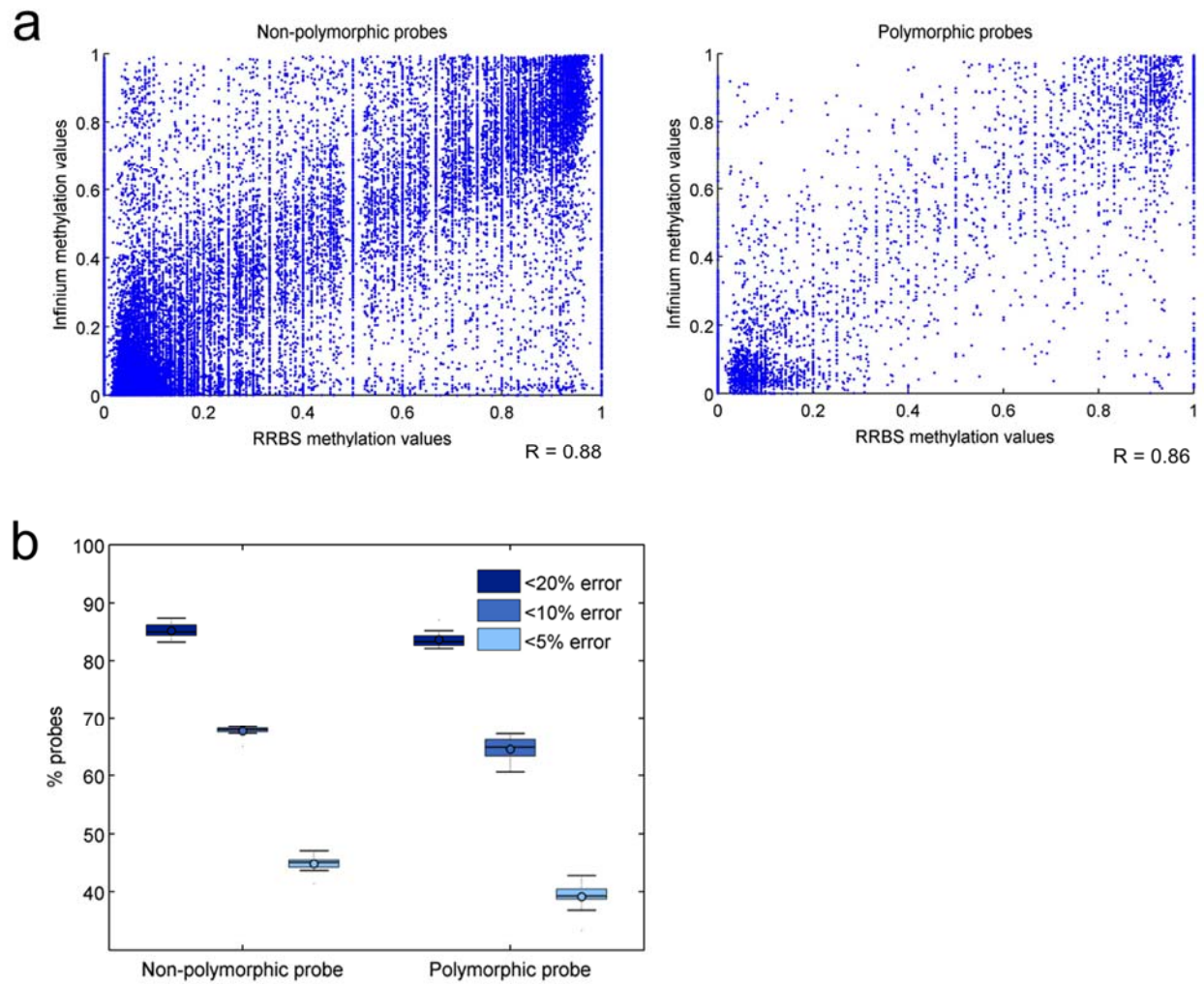


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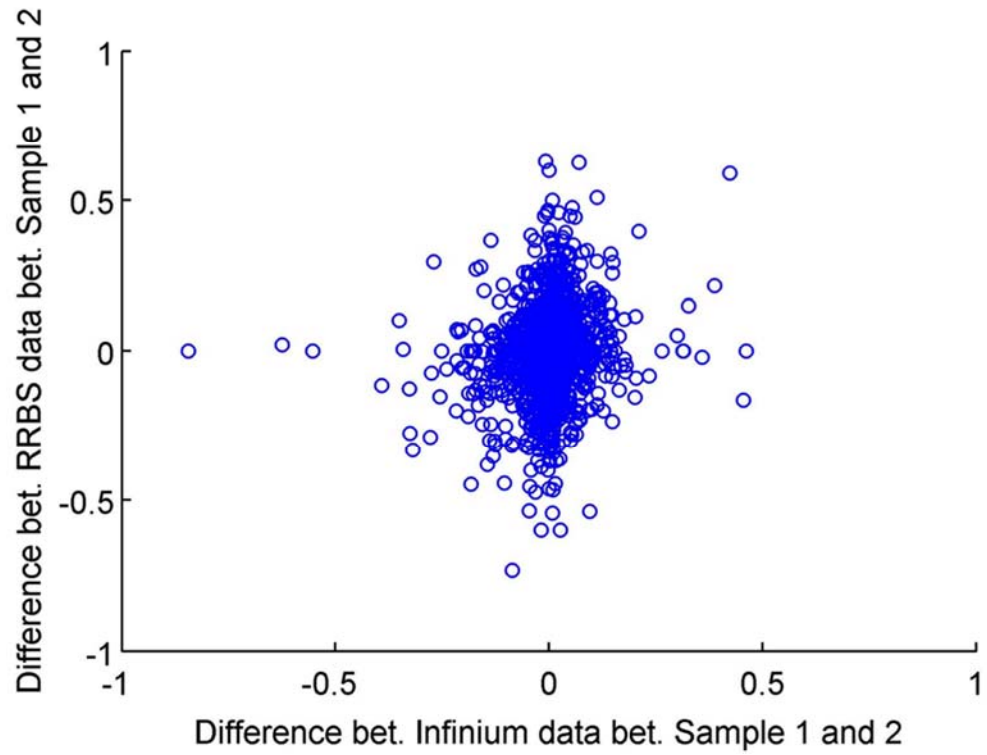
**Figure S2** (a) Scatterplot of Infinium 450K data for *Cynomolgus* macaque muscle sample versus technical replicate of sample. (b) Scatterplot of Infinium 450K data for two independent *Cynomolgus* macaque muscle samples.



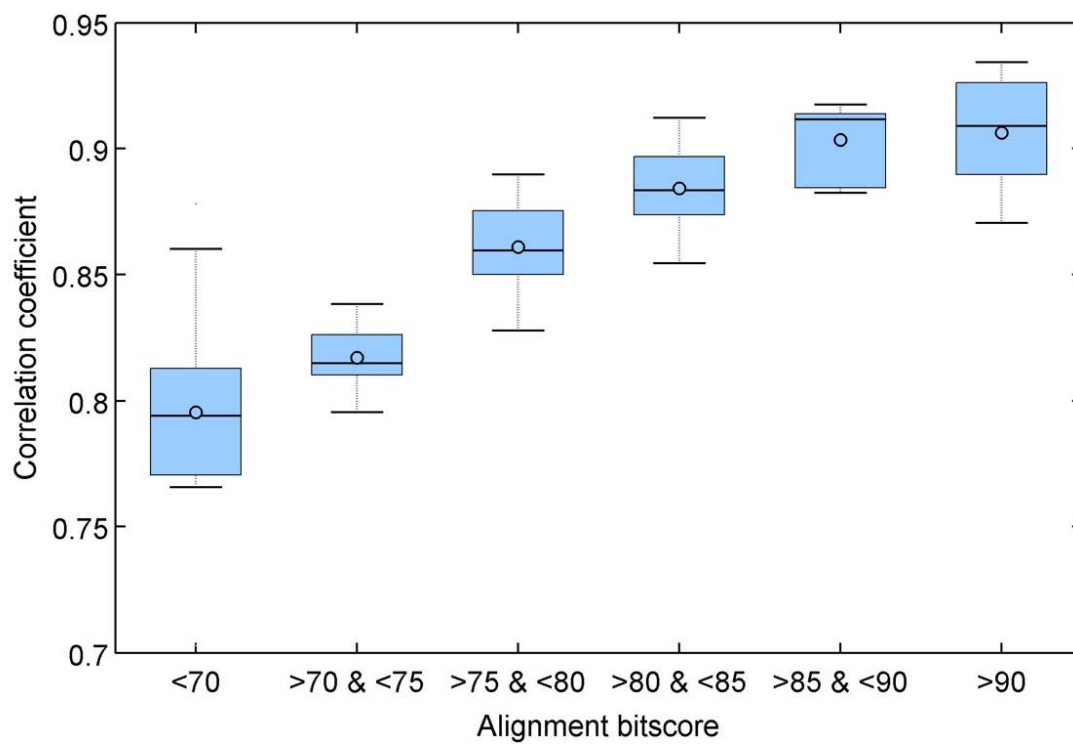
**Figure S3** (a) Scatterplot of Infinium 450K data versus RRBS data for one sample stratified by Infinium type I and type II probes. (b) Percent of probes with varying percent error between RRBS and Infinium data with type I or type II probes.



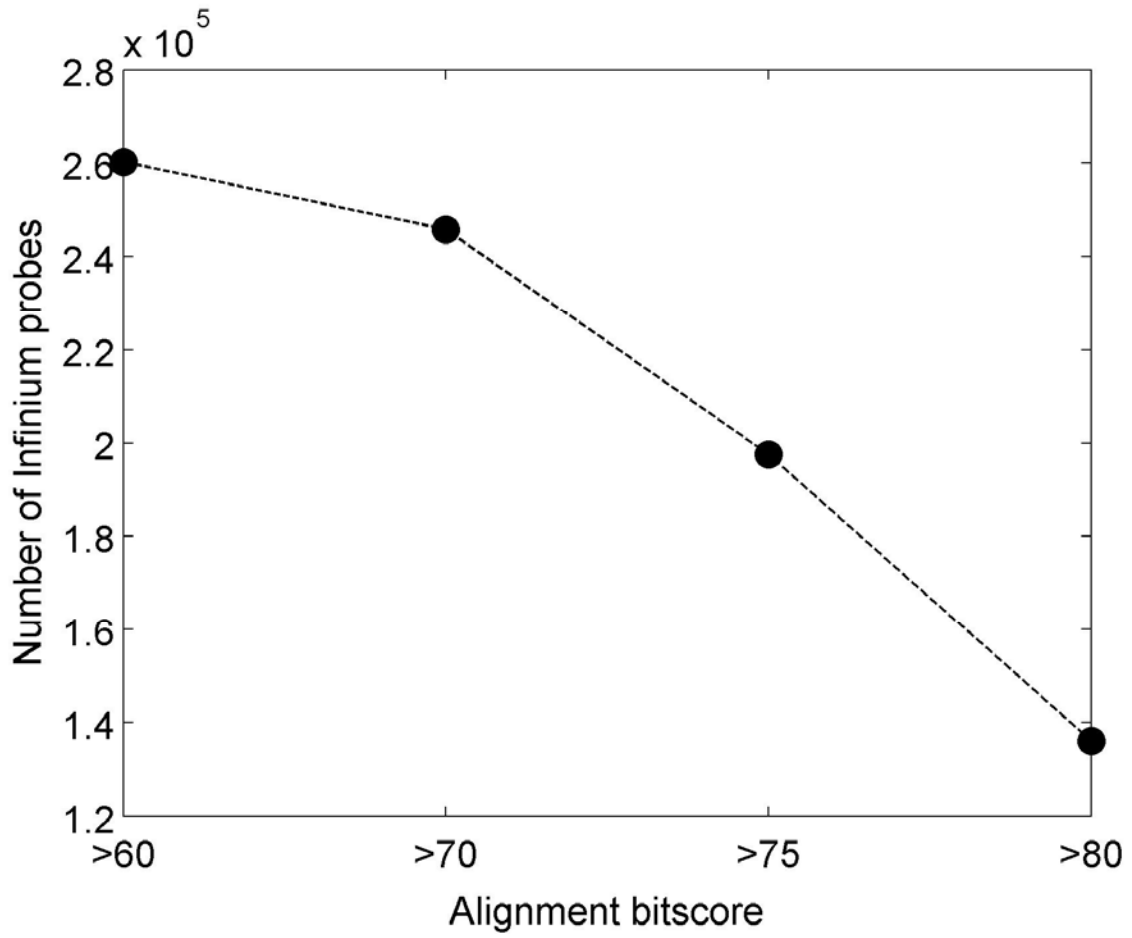
**Figure S4** (a) Scatterplot of Infinium 450K data versus RRBS data for all samples stratified by polymorphic and non-polymorphic probes. (b) Percent of probes with varying percent error between RRBS and Infinium data with non-polymorphic or polymorphic probes.



**Figure S5** Scatter plot of inter-individual differences between two samples as measured by the Infinium 450K array or RRBS.



**Figure S6** Correlation of Infinium 450K and RRBS data for selected probes sequences with bitscores in the indicative ranges.



**Figure S7** Number of array probes using different bitscore thresholds.



**Table S1 Per-sample correlation between RRBS and Infinium 450K data and % probes with less than 10% methylation difference between the two technologies stratified across different alignment scores.**

Alignment score	Sample number	1	2	3	4	5	6	7	8	9	10	10_rep	12
Bit score < 70	Correlation	0.70	0.88	0.78	0.79	0.86	0.81	0.77	0.81	0.80	0.77	0.77	0.80
	% Probes <10% error	54.7	63.6	55.7	64.0	62.1	64.5	57.8	62.5	64.3	59.2	60.0	63.9
Bit score > 70	Correlation	0.86	0.88	0.86	0.88	0.87	0.90	0.85	0.88	0.90	0.88	0.88	0.90
	% Probes <10% error	68.8	69.0	65.9	69.1	69.1	68.8	68.7	69.2	68.2	69.0	69.1	68.4
Bit score > 80	Correlation	0.88	0.90	0.88	0.91	0.88	0.92	0.88	0.90	0.92	0.90	0.90	0.92
	% Probes <10% error	70.4	69.7	66.9	70.6	70.8	70.2	71.4	70.3	69.8	70.3	71.8	69.6

**Table S2** Various alignment quality metrics for Type 1 and Type 2 Infinium probes.

Alignment quality	Infinium probe	
	Type 1	Type 2
Average % identity	96.1	96.3
Average bitscore	81.7	81.8
Average E-value	$3.4e^{-12}$	$2.6e^{-12}$

**File S1**

**Infinium 450K annotation file for *Cynomolgus macaque*.**

Available for download as an Excel file at <http://www.g3journal.org/lookup/suppl/doi:10.1534/g3.114.010967/-/DC1>.