# Infinium<sup>®</sup> QC Array-24 v1.0 BeadChip

Cost-effective sample QC and tracking for biobanking and high-throughput genomics.



Figure 1: Infinium QC Array-24 v1.0 BeadChip—High-throughput, costeffective genotyping for quality control, tracking, and stratification applications.

## Overview

The Infinium QC Array-24 v1.0 BeadChip offers a cost effective way to perform sample tracking, quality control, and stratification for high throughput genomics, biobanking, and any other application that requires validation of sample identity and quality. With 15,949 markers, the Infinium QC Array-24 v1.0 BeadChip offers markers focused on sex determination, ethnic ancestry, linkage, high value functional content, and several other categories (Tables 1 and 2).

The Infinium QC Array-24 v1.0 BeadChip utilizes the Infinium 24-sample HTS format. With the proven iScan® or HiScan® Systems, the Infinium QC Array-24 v1.0 BeadChip enables high accuracy and high-throughput genotyping required for quality control, tracking, and stratification applications (Table 1).

## Learn More

To learn more about the Infinium QC Array-24 v1.0 BeadChip and other Illumina genotyping products and services, visit www.illumina.com/techniques/popular-applications/genotyping.html.

#### Table 1: Infinium QC Array-24 v1.0 BeadChip Product Information

Feature	Descriptio	on
Total Number of Markers	15,949	
Number of Samples per BeadChip	24	
Input DNA Requirement	200 ng	
Assay	Infinium HTS	
Instrument Support	iScan or HiScan	
Sample Throughput <sup>a</sup>	5,760 samples/week	
Scan Time per Sample	2.5 minutes	
Description	Value <sup>b</sup>	Product Specification
Call Rate (Females-Y Excluded + Males-Y Included)°	99.92%	> 99%
Call Rate (Females + Males-Y Excluded) <sup>c</sup>	99.96%	> 99%
Reproducibility	99.99%	> 99.9%
Log R Deviation	0.13	< 0.30 <sup>d</sup>

 Estimate assumes 1 dual iScan system, 2 AutoLoader 2.x, 1 Tecan robots, 3 full-time employees, and a 5-day work week.

b. Values are derived from genotyping 708 HapMap reference samples.

c. Due to the large percentage of Y markers, female samples will appear to have low call rates if Y markers are not excluded for female samples.

d. Value expected for typical projects using standard Illumina protocols. Tumor samples and samples prepared by methods other than standard Illumina protocols excluded.

### Table 2: Infinium QC Array-24 v1.0 BeadChip Marker Information

Marker Category		Number of Markers	
ADME		1009	
Ancestry Informative		2910	
Blood Group		1659	
FingerprintSNPs		477	
Linkage		5486	
Extended MHC		930	
Mitochondrial		141	
Sex Chromosomes	X 1840	Y 1401	PAR 535

## **Ordering Information**

Infinium QC Array-24 v1.0 BeadChip Kit	Catalog No.
Infinium QC Array-24 v1.0 (48 samples)	20004347
Infinium QC Array-24 v1.0 (288 samples)	20004348
Infinium QC Array-24 v1.0 (1152 samples)	20004349

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