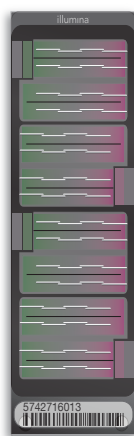


Superior content. Unprecedented flexibility. The most powerful whole-genome array.



Feature	Description		
Total Number of Markers	4,284,426		
Capacity for Custom Markers	Up to 500,000		
Number of Samples per BeadChip	4		
DNA Input Requirement	400 ng		
Assay	Infinium LCG Quad		
Instrument Support	iScan or HiScan		
Sample Throughput ^a	> 460 samples/week		
Scan Time per Sample	iScan 38 min	HiScan 15 min	
Variation Captured ($r^2 \geq 0.8$)	1KGP^b MAF > 5%	1KGP^b MAF > 1%	
CEU ^c	0.87	0.83	
CHB + JPT ^c	0.85	0.76	
YRI ^c	0.71	0.58	
Data Performance	Value ^d	Product Specification	
Call Rate	99.9%	> 99% avg.	
Reproducibility	99.99%	> 99.9%	
Log R Deviation	0.095	< 0.30 ^e	
Spacing	Mean	Median	90 th % ^d
Spacing (kb)	0.68	0.37	1.57

a. Estimate assumes 1 HiScan system, 1 AutoLoader 2.x, 1 Tecan robot, and a 5-day work week.

b. Compared against the June 2011 1kGP data release.

c. See www.1000genomes.org/category/frequently-asked-questions/population.

d. Values are derived from genotyping 284 HapMap reference samples.

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

Abbreviations: 1kGP, 1000 Genomes project; MAF, minor allele frequency.

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Table 2: Infinium HumanOmni5-4 v1.1 BeadChip Marker Information

Marker Categories	Number of Markers ^a		
In RefSeq Genes ²	2,010,538 (2,374,042 ^b)		
In RefSeq Exons	306,047		
In RefSeq Promoter Regions	92,555		
In ADME Genes	33,371 (42,540 ^b)		
In ADME Exons	5,767		
MHC (Extended MHC ^c)	24,482 (42,311)		
Overlap with Genes in COSMIC	1,830,712		
Overlap with Genes in Gene Ontology ³	474,003		
Nonsense Markers	933		
Missense Markers	69,667		
Synonymous Markers	62,308		
Silent Markers	172,934		
Mitochondrial Markers	195		
Indels	4,321		
Sex Chromosomes	X	Y	Par Loci
	113,662	2,404	5,256

a. Compared against the June 2011 1kGP data release.

Abbreviations: ADME, absorption, distribution, metabolism, and excretion; COSMIC, catalog of somatic mutations in cancer⁴; MHC, major histocompatibility complex.

[Learn More](#)

To learn more about the Infinium HumanOmni5-4 v1.1 BeadChips and other Illumina genotyping products and services, visit www.illumina.com/applications/genotyping.html.

References

1. www.1000genomes.org Accessed 18 April 2014.
2. www.ncbi.nlm.nih.gov/refseq Accessed 6 July 2015.
3. geneontology.org Accessed 6 July 2015.
4. cancer.sanger.ac.uk/cosmic Accessed 6 July 2015.

Ordering Information

Infinium HumanOmni5-4 v1.1 BeadChip Kit	Catalog No.
16 samples	WG-313-5001
48 samples	WG-313-5002
96 samples	WG-313-5003
384 samples	WG-313-5004
Infinium HumanOmni5-4+ v1.1 BeadChip Kit ^a	Catalog No.
16 samples	WG-313-5005
48 samples	WG-313-5006
96 samples	WG-313-5007
384 samples	WG-313-5008

a. Enabled for additional custom content.

a. Enabled for additional custom content.