

Infinium® ImmunoArray-24 v2.0 BeadChip

Evaluate autoimmune disorder and immune function-associated genetic variants on a single array.



Figure 1: Infinium ImmunoArray-24 v2.0 BeadChip—Comprehensive, immunology-focused array providing excellent coverage of expert-selected markers plus variant markers from the most common autoimmune diseases.

Overview

The Infinium ImmunoArray-24 v2.0 BeadChip is the next-generation genotyping array for detecting genetic variation in the human immune system (Figure 1). This updated array is based on the HumanImmuno v1.0 BeadChip, which has been cited in over 120 publications. Like its predecessor, it was designed for deep replication of genome-wide association studies (GWAS) and fine mapping of susceptibility loci in multiple immune-mediated disorders.¹

The Infinium ImmunoArray-24 v2.0 BeadChip supplements the most valuable content from the HumanImmuno v1.0 BeadChip with newly selected content produced by the immunology research community. This new content includes all the loci currently published in the GWAS catalog for major autoimmune and inflammatory disorders, ² and published ancestry informative markers.

The Infinium ImmunoArray-24 v2.0 BeadChip utilizes the Infinium 24-sample HTS format, enabling maximum throughput, productivity, and genotyping accuracy (Table 1). Using the proven iScan® or HiScan® Systems, the Infinium ImmunoArray-24 v2.0 BeadChip combines affordability with high-density content, allowing researchers to explore the relationship between gene variants and disease association in major autoimmune disorders (Table 2).

Table 1: Infinium ImmunoArray-24 v2.0 BeadChip Product Information

Feature	Description
Total Number of Markers	253,702
Capacity for Custom Bead Types	390,000
Number of Samples per BeadChip	24
Input DNA Requirement	200 ng
Assay	Infinium HTS
Instrument Support	iScan or HiScan
Sample Throughput ^a	5,760 samples/week
Scan Time per Sample	2.5 minutes

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

Table 2: Major Autoimmune and Inflammatory Diseases Represented on the Infinium ImmunoArray-24 v2.0 BeadChip

Allergy	Multiple Sclerosis	
Alopecia Arreata	Psoriasis	
Ankylosing Spondylitis	Rheumatoid Arthritis	
Asthma	Systemic Lupus Erythematosus	
Celiac Disease	Systemic Sclerosis	
Hodgkin's Lymphoma	Type 1 Diabetes	
Inflammatory Bowel Disease	Vitiligo	

Flexible Format

The Infinium ImmunoArray-24 v2.0 can be tailored to incorporate up to 390,000 custom bead types. It is available in a stand-alone version, and as an add-on to several standard Illumina genotyping BeadChips.

Learn More

To learn more about the Infinium ImmunoArray-24 v2.0 BeadChip and other Illumina genotyping products and services, visit www.illumina. com/applications/genotyping.html.

References

- 1. Cortes A, Brown MA. Promise and pitfalls of the immunochip. Arthritis Res Ther. 2011;13(1):101.
- 2. Welter D, MacArthur J, Morales J, et al. The NHGRI GWAS Catalog, a curated resource of SNP-trait associations. Nucleic Acids Res. 2014;42: D1001-D1006.

Ordering Information^a

Infinium ImmunoArray-24 v2.0 BeadChip Kit	Catalog No.
48 samples	WG-357-1001
288 samples	WG-357-1002
1,152 samples	WG-357-1003
Infinium ImmunoArray-24+ v2.0 BeadChip Kitb	Catalog No.
Infinium ImmunoArray-24+ v2.0 BeadChip Kit ^b 48 samples	Catalog No. WG-357-1011
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- a. Currently, Illumina can only accept preorders. The Infinium ImmunoArray-24 v2.0 BeadChip is expected to be available for shipment in early fourth quarter 2015.
- b. Enabled for additional custom content.

