Laso Biotech

Maize Industry-grade Breeding Array 10K

China's First Maize Breeding Microarray with Full Intellectual Property Rights
(On SNP Markers, microarrays, reagent kits and microarray scanners.)

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As China's First Maize Breeding Microarray, Maize Industry-grade Breeding Array 10K is designed with probe sequences derived from nearly 500 maize inbred line resequencing datasets, covering core germplasm resources from both domestic and international sources, ensuring broad applicability. Probes are based on the fourth edition of the B73 reference genome (B73 RefGen_v4), allowing easy conversion to other single-marker assays or integration with other marker results.

This microarray features nearly 10,000 markers, optimized using tests from about 200 inbred and hybrid lines, and is evenly distributed across the maize genome. It boasts an average call rate of 99.3% and a reproducibility rate of 99.9%, significantly accelerating the development of high-quality maize varieties and enhancing the sustainability and economic benefits of agricultural production.

Applications

- Authentication and Evaluation of DH Lines
- Backcross Selection
- Variety Authentication (SNP Method)
- Functional Gene Detection
- Genetic Map Construction
- Genomic Selection

Features

Extendable
Add custom content to panels,
stay updated with discoveries.

Cost-effective
Demonstrates significant cost benefits
during large-scale testing.

Efficient
Up to 2304 samples in a single round.
⩽ 72h turnaround per experiment.

Accurate
Average call rate ⩾99.3%.
Reproducibility ⩾99.9% per marker (15-30 assays).

Data Performance

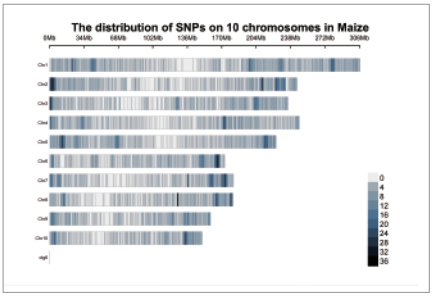

Figure 1 : The distribution of SNPs on
10 chromosomes in maize.

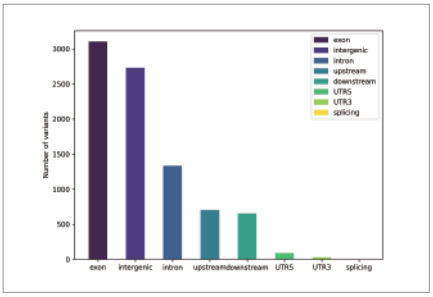

Figure 2: The annotation of core markers of the Maize
Industry-grade Breeding Array 10K.
*Markers in exons: 35.86%.

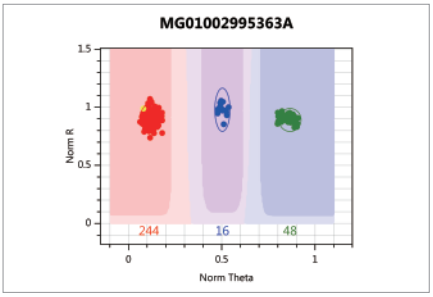

Figure 3 : Genotype call rate for test samples
with the Maize Industry-grade Breeding Array 10K.
*Mean call rate: 99.94%.

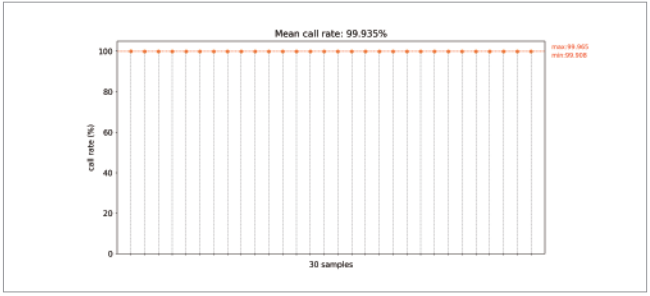

Figure 4:Genotype reproducibility for test samples
with the Maize Industry-grade Breeding

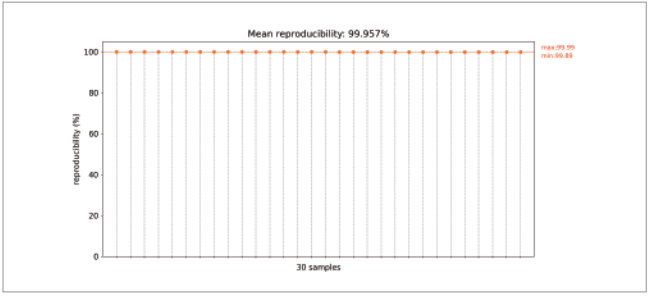

Figure 5:Genotyping clustering plot of a single SNP in the
Maize Industry-grade Breeding Array 10K.

About LASO Biotech

Suzhou LASO Biotech is a leading pioneer in China for the independent development, production, and commercialization of microarrays, offering an integrated microarray solution, encompassing chips, the chip scanner OmniScan, reagents and softwares.

As of now, LASO Biotech has obtained 13 granted invention patents, 3 utility model patents, and 1 medical device registration certificate, establishing the most comprehensive IP portfolio in China's microarray R&D field.

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