Laso Biotech

Maize Industry-grade Breeding Array 10K

Made in China with Full Intellectual Property Rights
(On microarrays, reagent kits and microarray scanners)

LASO BIOTECH

As China's first maize breeding microarray, Maize Industry-grade Breeding Array 10K is designed with probe sequences derived from resequencing data of nearly 500 maize inbred lines, covering core germplasm resources from both domestic and international sources, ensuring broad applicability. Probes are based on the fourth version 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 about 200 inbred and hybrid lines, and the markers are 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
Allows researchers to add custom content and stay updated with recent discoveries.

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

Efficient
Up to 2304 samples in a single round.
Less than 72h turnaround time.

Accurate
Average call rate ⩾99.3%.
Reproducibility ⩾99.9%.
15-30 repeated assays per marker.
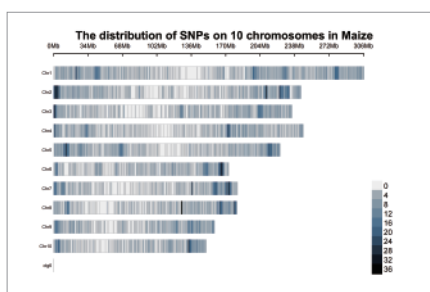
▶ Data Performance

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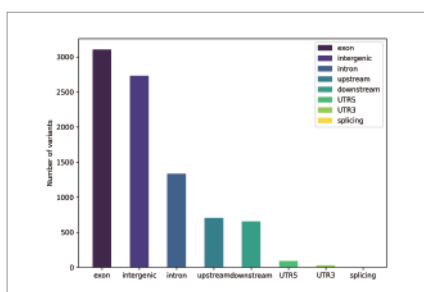10 chromosomes in maize.

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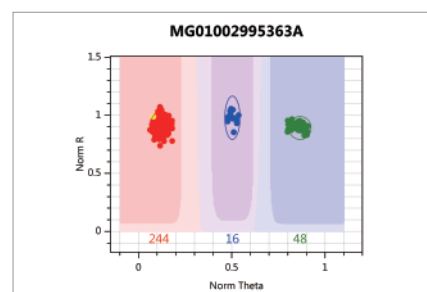*Markers in exons: 35.86%.

Figure 3: Genotyping clustering plot of a single SNP in the Maize Industry-grade Breeding Array 10K.
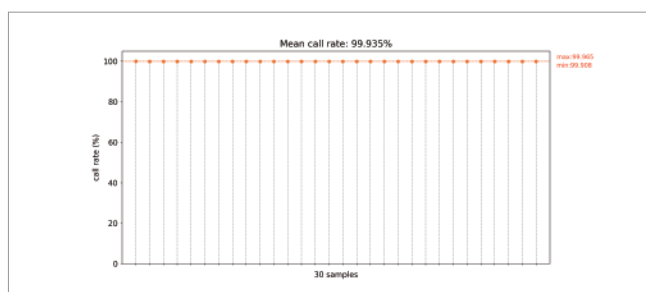

Figure 4: Genotype call rate for test samples with the Maize Industry-grade Breeding Array 10K.
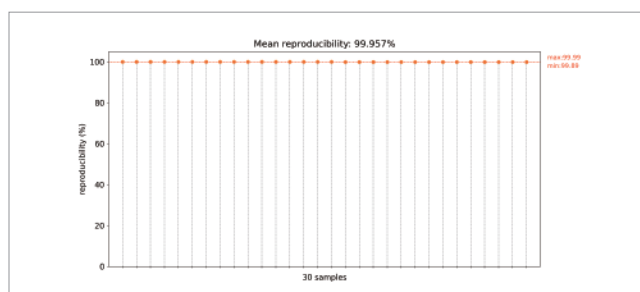*Mean call rate: 99.94%

Figure 5: Genotype reproducibility for test samples with the Maize Industry-grade Breeding Array 10K.
*Mean reproducibility: 99.96%

▶ About LASO Biotech

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

As of now, Laso Biotech has obtained 13 invention patents, 5 utility model patents, 4 design patents, and 1 medical device registration certificate, making it the company with the most comprehensive intellectual property portfolio and independently controllable core technologies for microarray under Chinese law.