

Ready-to-Use Cucumber Panels

GenoBaits® Cucumber 10K Panel

The 10K panel features 10,207 markers that are evenly distributed across the chromosomes, covering key genomic regions and including 10,149 background markers. This comprehensive panel is suitable for:

- ✓Genetic Diversity Analysis
- ✓Genetic Research (GWAS, QTL Mapping, etc.)
- ✓Marker-Assisted Breeding
- ✓Germplasm Identification

Parameter	Specification
Genotyping Consistency Rate (%)	>99.60
Uniformity Rate (%)	99.58
SNP Call Rate (%)	99.76

*Mean depth : 50X Number of sample : 18

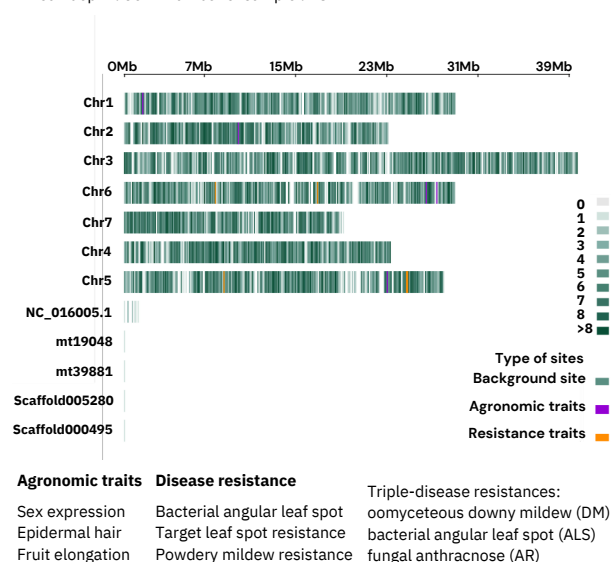
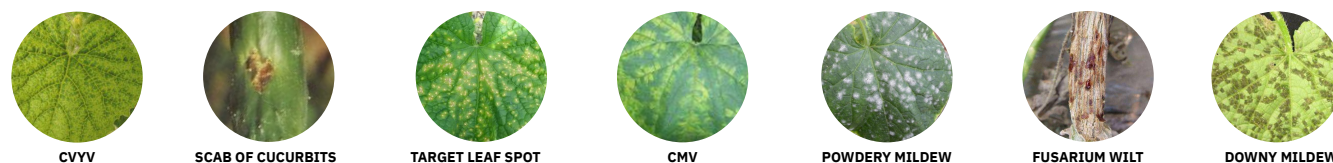


Figure 1. Distribution of 10k SNP numbers on chromosomes (1.0 Mb window size).



Customized Panel Development

In addition to our extensive portfolio of genotyping products, we offer bespoke services tailored to your specific needs. By providing your unique SNP list, we can swiftly design cost-effective liquid-phase panels, ranging from low to high density, that align with your research or breeding objectives.

Elevate your breeding programs with our innovative cucumber panels, designed to support your pursuit of excellence in cucumber variety development.

Services Process



GenoBaits® Cucumber 1K Panel

The cucumber 1K panel contains a total of 1,131 markers, which include 54 favorable genomic SNPs, 1,077 evenly distributed whole genome SNPs, and 25 SSRs (Figure 2). These markers collectively cover 22 key traits, such as disease resistance, stress tolerance, and fruit characteristics. This panel is ideal for research on cucumber genetic analysis, variety authentication, and molecular precision breeding (Table 1).

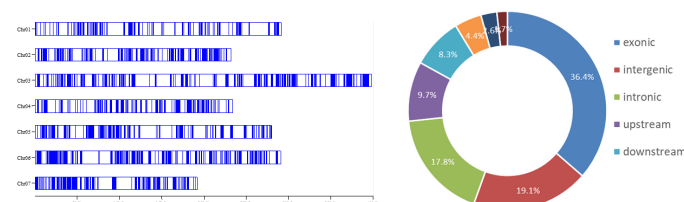


Figure 2. Distribution of 1k SNP numbers on chromosomes and Annotation of SNPs

Agronomic traits

Internal Seed Germination	Black Thorn & Yellow Skin	
Elongation of Peduncle	Fruit Length and Brightness	Fragrance
White Pericarp	Bitter Taste	Fruit Size

Table 1-1. Related agronomic traits of 1K panel

Resistance traits

Scab of Cucurbits	Cold Tolerance	Cucumber Mosaic Virus
Tuberculate Fruit Gene	Flood Tolerance	Cucumber Vein Yellowing Virus
Disease Resistance	Downy Mildew	Cucumber Fusarium Wilt
Blunt with Blossom	Powdery Mildew	Cucumber Target Leaf Spot

Table 1-2. Related resistance traits of 1K panel

Genomic Marker Panels for Cucumber Variety Breeding

By GBTS

Genotyping By Targeted Sequencing

Ready-to-Use Panels

Product name	Technology	Core SNP	mSNP	Site Type
GenoBaits® Cucumber 10K Panel	GenoBaits®	10207	12409	SNP
GenoBaits® Cucumber 1K Panel	GenoBaits®	1131	1571	SNP,SSR

Reference Ggenome: Cucumis_sativus_ChineseLongv2