

Porcine 50K Panel & 1K Panel

The domestic pig (*Sus scrofa*) is one of the important livestock species and also a model animal for biomedical research. The research team led by Dr. Ding Xiangdong from Shangdong University has designed the liquid capture porcine Genobaits 50K and 1K panels based on sequencing hundreds of pig breeds (including 32 Duroc, 86 Large white, 29 Erhualian, 94 Yorkshire, and China south and north pigs). Total 52K probes is made of this porcine panel, and were validated in commercial breeding panel. The 1K panel contains 1,200 SNP selected markers, which can be used for parental verification, pedigree correction and breed composition analysis.

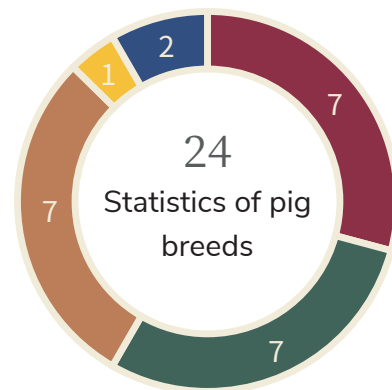
Product Highlight

- **Modular design:** This 50K panel can be sub-selected to a 10K module for specific female population expansion testing
- **Flexible addition:** New discovered association SNPs or trait related SNPs can be added into the 50K panel for upgrade
- **Simple sampling:** Pig ear, tail and blood are all accepted for sample processing and DNA extraction
- **Fast turn around time:** Only 14 days are needed from sample arriving to report

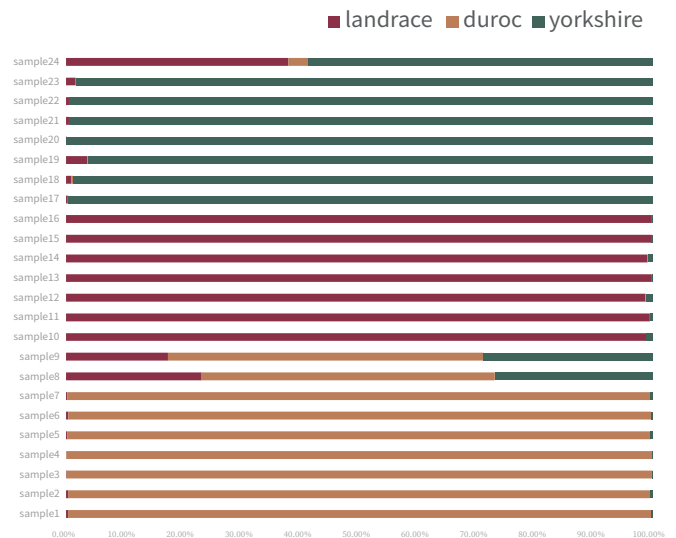


Application example – Landrace, Duroc Yorkshire breed composition analysis

- Purebred Duroc
- Purebred Landrace
- Purebred Yorkshire
- Sanyuan Pig
- Binary Pig



Statistics of pigs test results



Breed composition analysis of pigs introduced from pig farm

Service process



Submit sample
for DNA QC



Library construction and
sequence capture



High-throughput
sequencing



Data quality control and
sequence trimming



Breeding value
calucation

The distribution of markers across the genome for 50K Panel

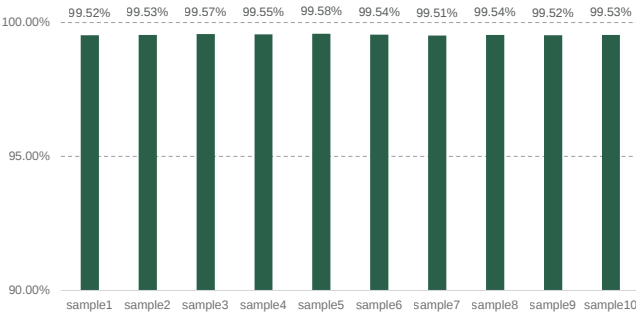


Figure1. Data Mapping Rate Based on DNBSEQ-T7 Gene Sequencer*

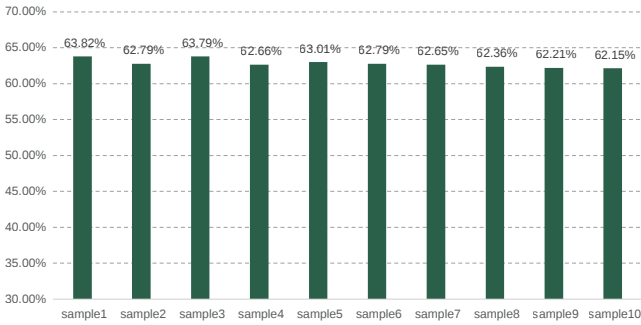


Fig. 2. Data Capture Efficiency Based on DNBSEQ-T7 Gene Sequencer*

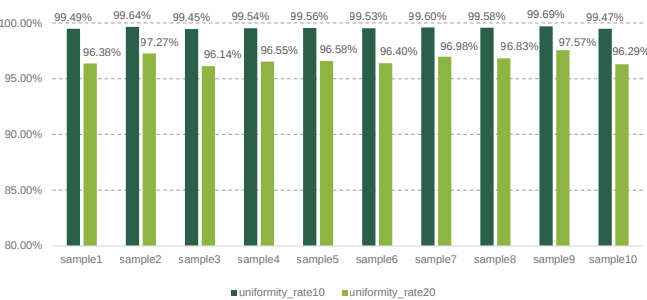


Fig. 3. Data Uniformity Based on DNBSEQ-T7*

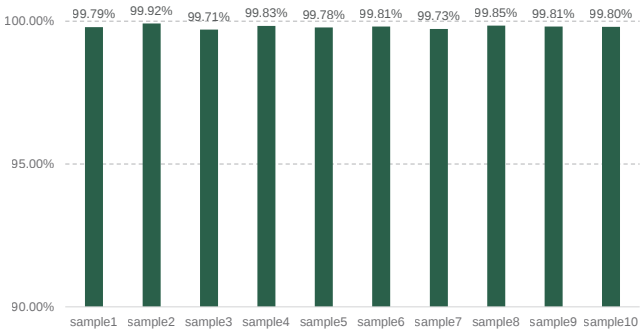


Fig. 4. SNP Detection Rate Based on DNBSEQ-T7 *

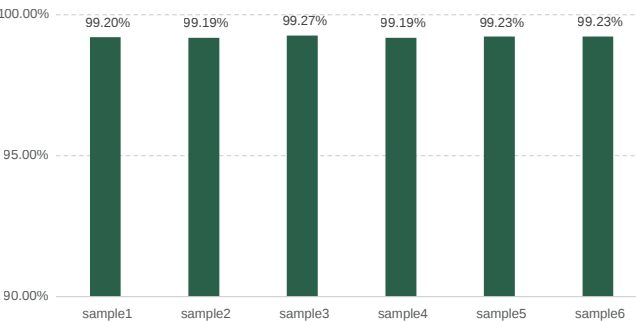


Fig. 5. Genotype consistency based on DNBSEQ-T7*

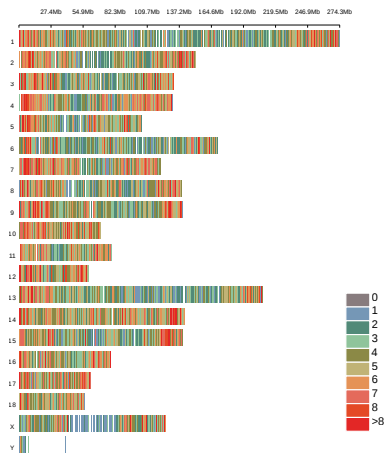


Fig. 6. SNP markers based on DNBSEQ-T7* are evenly distributed on each chromosome

