

## Introducing the innovative GenoBaits Sheep 1K Liquid Chip - the most cost-effective chip for sheep breeding and genetics research!

Jointly developed by esteemed experts from the Lanzhou Institute of Husbandry and Pharmaceutical sciences, Chinese Academy of Agricultural Sciences, and MolBreeding Biotechnology Co., Ltd., this chip is the result of cutting-edge research and development. Featuring a comprehensive collection of major parentage identification loci from foreign breed associations and breeding organizations, as well as covering major sheep breeds both domestically and internationally, our chip is the ultimate tool for detecting multiple known candidate genes and key functional loci related to important traits of sheep. Whether you're looking to improve growth, slaughter, reproduction, coat color, horn type, stress resistance, or other traits, our chip has got you covered.

Our Sheep 1K Liquid Chip is perfect for molecular marker-assisted breeding, parentage identification, genetic disease screening, and genetic diversity analysis. With unparalleled accuracy and cost-effectiveness, it's the ultimate choice for optimizing your sheep breeding and genetics research programs. Upgrade your sheep breeding and genetics research today with our state-of-the-art Sheep 1K Liquid Chip!

## The panel includes:

- Parentage verification loci compatible with core loci of New Zealand, Australia, American, and international sheep genome associations and breeding organizations
- · Polymorphism loci carefully selected from resequencing data of sheep breeds worldwide
- Sites on the Y chromosome (NCBI: CM022046.1)
- Marker sets evenly distributed across the sheep Oar\_V4.0 reference genome
- Candidate genes and key functional sites related to important traits such as growth, slaughter, reproduction, coat color, horn type, disease/stress resistance, and more
- Candidate genes and key functional sites were selected from the OMIA (Online Mendelian Inheritance in Animals) database, Sheep QTL database (Animal QTLdb, 2023), and some publications.
- The GenoBaits® Sheep 1K Panel is the ultimate solution for sheep breeding and genetics research, providing unparalleled accuracy and precision.

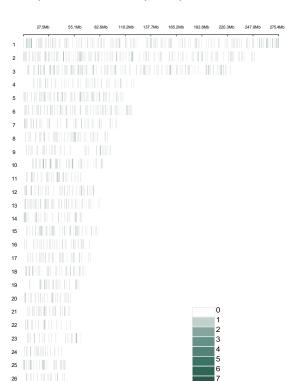


Figure 1 Distribution of target SNP sites on chromosomes

Υ |

Definition of ruler: SNP numbers of each sliding window in genome (along a window size of 500Kb)

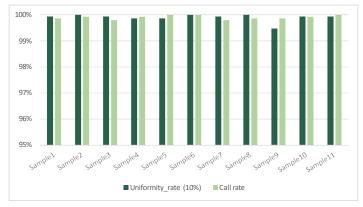


Figure 2 The uniformity\_rate (10%) were between 99.48% - 100%, Call rate were between 99.80% - 100%.

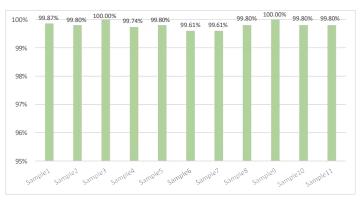


Figure 3 Genotype consistency of repeat samples were between 99.61% - 100%.