

Agrigenomics

Highly reliable and cost-effective SNP selection for parentage and other important traits

Informative and results-proven markers

The markers on the Applied Biosystems™ Axiom™ Porcine Breeders Array are focused on genomic selection of commercial breeds, including Large White, Landrace, Duroc, and Piétrain. Core markers for the Axiom Porcine Breeders Array were selected from markers on our porcine genotyping array (Axiom_PigHDv1), which have been evaluated with samples from multiple commercial and domestic pigs, including European wild boars. This process of single-nucleotide polymorphism (SNP) selection helps ensure that all the SNPs on the array are known to be working, unlike current in-market arrays that have SNPs that are known not to work. Markers associated with important traits such as parentage are also included on the Axiom Porcine Breeders Array. These include markers associated with pork meat quality, growth, leanness, meat efficiency, and physiological control of feed intake, hunger fulfillment, and obesity. Markers interrogated by the Axiom Porcine Breeders Array include melanocortin 4 receptor (MC4R), cholecystokinin type A (CCK) receptor, and insulin-like growth factor 2 (IGF2).

The inclusion of informative and well-performing markers from existing porcine arrays enables use of this array for comparison with data generated by previous studies. In addition, the [Applied Biosystems™ Axiom™ Long Format Export \(AxLE\) Tool](#) converts Axiom array data to long format for easy integration with your current bioinformatics infrastructure and pipeline.



Features

- 55,150 markers for genomic and trait selection
- 42 trait-specific markers selected by the United States Department of Agriculture
- 64 parentage markers, including International Society for Animal Genetics (ISAG) core markers
- SNPs evenly distributed across the porcine genome
- Marker annotations aligned to the Sscrofa10.2/susScr3 genome and SNP database (dbSNP) 148

Applications

- Parentage analysis
- Identification of economically important traits
- Genetic improvement of pure lines
- Targeted for commercial breeds, including Large White, Landrace, Duroc, and Piétrain

Ordering information

Product	Description	Cat. No.
Axiom Porcine Breeders Array, 384HT format	Contains one 384-array plate (reagents and consumables for GeneTitan Multi-Channel Instrument sold separately)	550833
Axiom 2.0 384HT Reagent Kit	Includes all reagents (except isopropanol) for processing 384 DNA samples	902245
Axiom 2.0 384HT GeneTitan MC Consumables Kit	Contains all GeneTitan Multi-Channel Instrument consumables required to process 384 DNA samples	902234
Axiom Porcine Breeders Array, mini-96 format	Contains one mini 96-array plate (reagents and consumables for GeneTitan Multi-Channel Instrument sold separately)	550855
Axiom 2.0 Assay Mini 96 Reagent Kit	Includes all reagents (except isopropanol) for processing samples for two mini 96-array plates	903013
Axiom 2.0 Assay Mini 96 Manual Target Preparation Consumables Kit	Includes all reagents (except isopropanol) for processing samples for four mini 96-array plates	902986
Axiom 384HT High-Volume Consumables Kit	Contains all GeneTitan Multi-Channel Instrument consumables required to process samples for five 384-array plates or five mini 96-array plates	902629

 Learn more at thermofisher.com/agrigenomics

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