

Atlantic Salmon

Salmo Salar



AQUAarray Low Density

Number of SNPs: Up to 1,000

Atlantic Salmon

- Genetic Overview (GO) Analysis
- Parentage Assignment
- Marker Assisted Selection
- Identification of Genetic Sex
- Species / Strain / Population Identification
- Traceability Management

**NOTE: LD applications vary from species to species.
Please contact us for details.**

AQUAarray Medium Density

Number of SNPs: Up to 10,000

- Genetic Overview (GO) Analysis
- Parentage Assignment
- Marker Assisted Selection
- Identification of Genetic Sex
- Species / Strain / Population Identification
- Traceability Management
- GWAS
- Genomic Selection
- Marker Discovery

AQUAarray High Density

Number of SNPs: Over 10,000

- Genetic Overview (GO) Analysis
- Parentage Assignment
- Marker Assisted Selection
- Identification of Genetic Sex
- Species / Strain / Population Identification
- Traceability Management
- GWAS
- Genomic Selection
- Marker Discovery

MORE GENOTYPING PANELS

- [Axiom™ Salmon Genotyping Array](#)

[Read more info on Genotyping Tools.](#)

Summary:

DNA technology is a game-changer for every salmon producer's breeding program, offering benefits and return on investment based on the chosen SNP tool: [low-density \(LD\)](#), [medium-density \(MD\)](#), or [high-density \(HD\)](#). Regardless of the tool, DNA technology adds precision to selection decisions.

For those starting in genomics without population knowledge, we recommend a low-density panel with fewer than 200 SNPs. It provides insights into population genetics, relatedness, and inbreeding. This panel

also enables parentage testing, a crucial step in estimating genetic merit.

Our **AQUAarray LD Atlantic Salmon** panel is tailored to the specific needs of this species. It includes markers for genetic sex determination, allowing early identification before sexual maturation. It also features continent-of-origin markers, facilitating genetic reconstruction of geographical origins and differentiation between *North American Atlantic Salmon* and other strains.

Maximize the potential of your salmon breeding program with **AQUAarray HD North American Atlantic Salmon** - a state-of-the-art, versatile solution that integrates the latest advancements in genetic marker information. Boasting around 50,000 markers, it surpasses expectations in parentage testing, genomic selection, and marker-assisted selection. Unleash the full power of this cutting-edge SNP genotyping tool and unlock the true potential of your salmon breeding program.

Once equipped with knowledge about population structure from high-density (HD) genotyping, **AQUAarray MD Atlantic Salmon** panel becomes a cost-effective option. By imputing to your existing HD dataset, you can maintain precision while saving costs.

Our team welcomes the opportunity to leverage the existing panels available on the market, contact our team to learn more.