



REELING IN THE FUTURE OF AQUACULTURE

Dive Deep into our Tailored Genomics Solutions for Sustainable Breeding

In a world grappling with over-fishing and its environmental impact, Eurofins Genomics supports sustainable aquaculture through genomic testing solutions. As the global demand for seafood grows, our commitment to environmental stewardship is unwavering. Our cutting-edge services provide breeders with insights into the genetic makeup of aquatic species, facilitating informed decisions for sustainable breeding programs through selection for desirable traits like disease resistance and optimal growth.

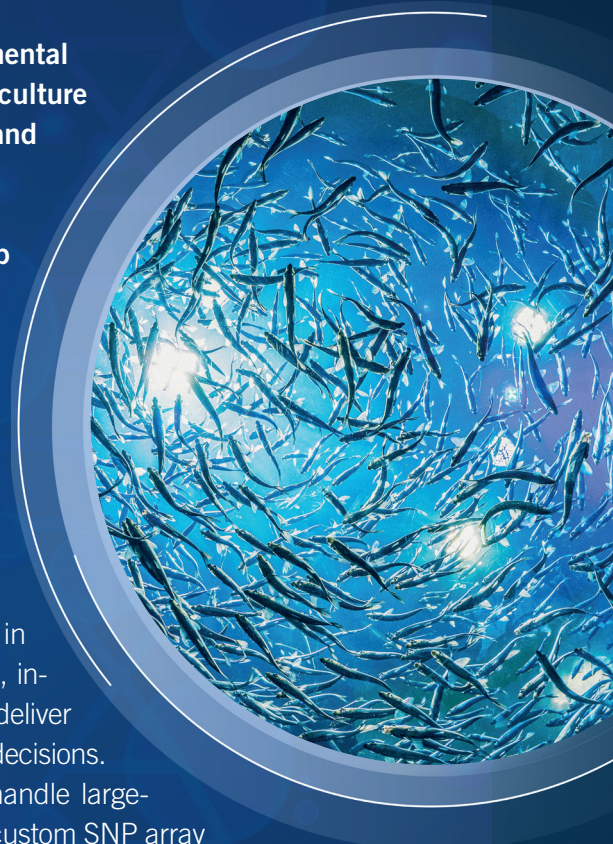
1. Unleashing Genomic Selection with Microarray Technology

At Eurofins Genomics, we are helping the to drive the revolution in genomic selection in aquaculture. Our state-of-the-art technologies, including Illumina and Thermo Fisher Scientific microarray platforms, deliver reliable and timely results for breeders to make informed selection decisions. With streamlined operations and automated DNA extraction, we handle large-scale projects while maintaining the highest quality standards. Our custom SNP array development, guided by our Agrigenomics experts, provides precise genomic information tailored to each breeders' unique needs.

- **High throughput:** Enables analysis of a large number of genetic markers simultaneously.
- **Fast turnaround times:** Provides timely results for informed breeding decisions.
- **Comprehensive genomic coverage:** Allows analysis of multiple complex genetic traits in parallel.
- **Reliable and accurate:** Industry standard technology platforms.

2. Empowering Confident Breeding Decisions through Accurate Parentage Testing

Parentage testing plays a vital role in aquaculture by providing valuable insights into the genetic lineage of aquatic organisms. With the ability to accurately determine parentage, breeders can track and verify the parent-offspring relationships, ensuring genetic diversity and maintaining



desirable traits in their breeding programs. By implementing parentage testing, aquaculture operations can enhance their breeding strategies, optimize selection processes, and reduce the risk of inbreeding. This valuable information allows breeders to make informed decisions in pairing individuals with desired genetic characteristics, ultimately improving the overall productivity, performance, and sustainability of aquaculture operations.

- **Custom SNP panels:** parentage testing can be developed for any species using defined marker sites
- **Rapid:** Genotyping-by-Sequencing platforms enable a high level of accuracy and sample throughput
- **Lowest cost:** Maximise budget

3. Safeguarding Aquaculture with Powerful Genetic Tools

Routine pathogen surveillance is essential for intensive farming systems such as aquaculture. Molecular-based detection through PCR and sequencing-based technologies enables swift and accurate detection of pathogens. In addition to conventional PCR systems, our Fluidigm Biomark platform can detect multiple pathogens in parallel using gold standard assay technologies, providing a solution for early identification and proactive management to mitigate economic loss and maintain healthy populations in aquaculture systems:

- **Custom assay design available**
- **1-24 assays (pathogens) per sample**
- **Up to 10,000 samples per week**
- **Optimised protocol for fish sample extraction**

Eurofins Genomics is your partner in sustainable aquaculture, utilising genomics for precision breeding, confident decisions, and powerful capabilities in pathogen surveillance. Join us in shaping a future where responsible fish farming is driven by the power of genomics.

Contact us to discuss how we can help you reach your breeding goals!

EUROFINS GENOMICS DENMARK A/S

Smedeskovvej 38 / 8464 Galten, Denmark
AG_agrigenomics_projects@genomics.eurofinseu.com
+45 7027 1170 / eurofinsgenomics.com



Get better fish 

