THE CENTER FOR AQUACULTURE TECHNOLOGIES

Pacific White Shrimp

Whiteleg shrimp

L. vannamei



AQUAarray Low Density
Number of SNPs: Up to 1,000

- 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.

THE CENTER FOR AQUACULTURE TECHNOLOGIES

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

Summary:

Embrace the advantages of DNA technology in your Pacific White (vannamei) shrimp breeding program and unlock its vast potential. Whether you opt for low-density (LD), medium-density (MD), or high-density (HD) tools, DNA technology ensures unparalleled precision in your selection decisions.

For those venturing into genomics without prior knowledge of their populations or strains, our recommended **AQUAarray LD vannamei** panel with nearly 200 SNPs provides invaluable insights into the genetic architecture. It establishes a foundation for understanding relatedness, inbreeding, and enables vital parentage testing—a crucial step in calculating EBVs (Estimated Breeding Values), which determine genetic merit.
AQUAarray LD vannamei goes the extra mile by including additional markers correlated with genetic sex determination. This non-invasive and simple method allows for early sex identification before sexual maturation.

★ **AQUAarray HD vannamei**, is a cutting-edge high-density genotyping panel designed to revolutionize shrimp breeding programs worldwide. This advanced tool combines the latest advancements in shrimp genetic marker information, ensuring unparalleled precision and effectiveness.
Key features of AQUAarray HD vannamei include:

- Incorporation of 6,500 proven SNPs for GWAS and Genomic Selection.
- Integration of 43,474 high-quality and informative SNPs sourced from geographically diverse populations, including Ecuador, Mexico, USA, Thailand, China, Malaysia, Colombia, and Peru.
- Strategic SNP spacing across the mapped shrimp genome.
- Inclusion of 60 putative functional SNPs associated with critical traits such as ammonia tolerance, growth, and disease resistance.

Optimized for all shrimp breeding regions, AQUAarray HD vannamei empowers breeders to unlock the full potential of their programs. Harness the unrivalled power of genetic improvement and drive transformative advancements in shrimp breeding

---

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