



GGP

GeneSeek® Genomic Profiler™ Ovine 50K

Developing GGP Ovine 50K

Ensuring you have the best and most reliable ovine genomic product is critical. That's why NEOGEN® Genomics has developed the most comprehensive and informative array — the GGP Ovine 50K — a tool that provides exceptional genotyping data derived from Australian, African, European, and U.S. based research groups.

To make the most informative array offered globally to the sheep community, we've combined our proprietary Multiple Objective Localized Optimization (MOLO)* design process with the most relevant and impactful SNPs from previous genotyping arrays into a single comprehensive solution. The included SNP content consists of 15,000 SNPs from the GGP Ovine 15K, over 10,000 SNPs from the existing Illumina 50K array, more than 12,000 SNPs from Illumina HD content, and over 1,700 SNPs to fill in spatial gaps within the genome. In addition, the GGP Ovine 50K includes 9,000 SNPs from the new novel sequence not previously included in earlier genotyping products.

The array also features parentage markers and valued add-on content for various economically relevant traits.

*Optimal Design of Low Density SNP arrays for Genomic Prediction, Wu, Xiao-Lin et.al. 2016

SNP Content Overlap

Arrays	Total SNPs	GGP Ovine 50K	ILMN Ovine 50K v1	ILMN Ovine 50K v2
GGP Ovine 50K	45,761	–	21,532	21,115
GGP Ovine 15K	16,560	15,811	4,311	4,366
ILMN Ovine 50K v1	54,241	21,532	–	51,953
ILMN Ovine 50K v2	52,001	20,798	51,953	–
ILMN Ovine HD 600K	563,597	28,829	35,327	34,261