



RapidGenomics
Genotyping Solutions



Amp-Seq One industry standard bovine ICAR+ 0.6K panel*

* Co-developed with Illumina Inc.

Amp-Seq One is the first one-step targeted genotyping by sequencing (GBS) workflow that can analyse thousands of samples across thousands of markers. The simplified workflow has been designed to halve library preparation time and double throughput.

ICAR+ panel content

The Amp-Seq One industry standard pre-designed ICAR+ panel includes the 554 SNP ICAR panel which incorporates the 199 SNP ISAG panel for parentage verification.

The ICAR+ panel includes four additional traits: A2/A2, Coat color (Red/Black/Wild), Pompes E7, Horned/Polled (Celtic and Friesian).

Note: Some of these traits are multi-allelic and the Amp-Seq One ICAR+ panel targets multiple SNPs/sites per trait. For full details, please see the [marker list for this panel](#).

Recommended sequencing depth and chemistry

- 125,000 reads per sample
- 200 reads per locus

The Amp-Seq One ICAR+ panel is fully compatible with both 1 x 150 bp (single-end) and 2 x 150 bp (paired-end) workflows.

Breed validation

The panel was validated on Angus and Hereford background and 21 samples provided by ISAG (default qualification samples).

Data analysis

LGC's Biosearch Caller analysis pipeline is specifically optimised for genotype calling in Amp-Seq One and is available to Amp-Seq One customers without a license. The pipeline is flexible and can be configured to suit your requirements.

illumina[®]



**Diagnostics
& Genomics**

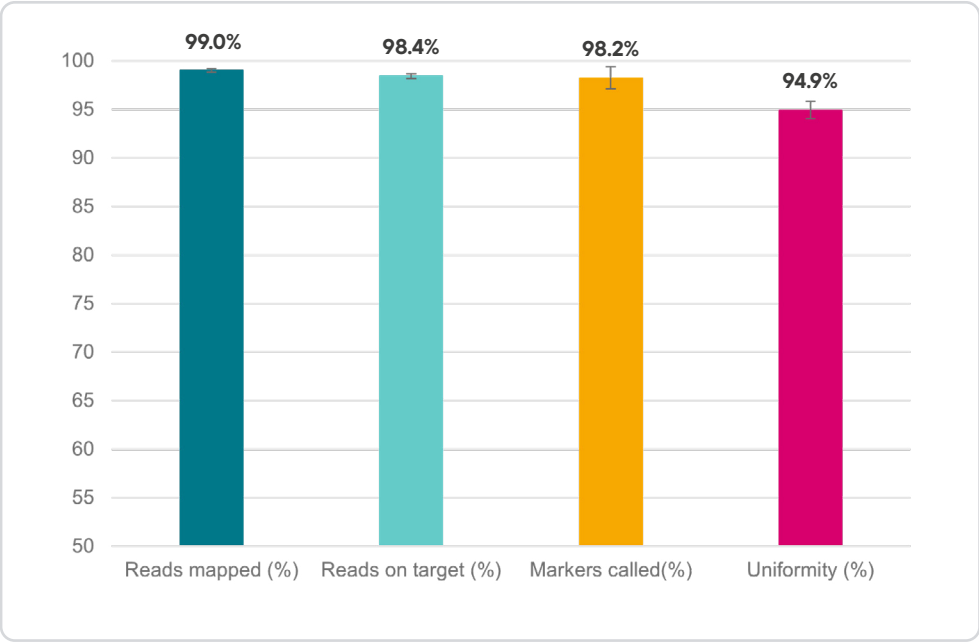


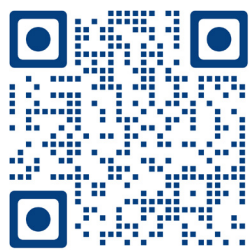
Figure 1. Core performance metrics for the ICAR+ 0.6K panel, illustrating high quality sequencing results obtained for Amp-Seq One for 384-samples, including 22 ISAG samples for panel validation. DNA was normalised to 5 ng total input.

Kit components

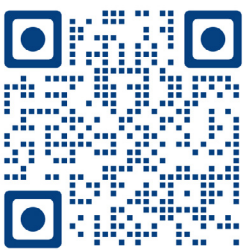
- 1. Amp-Seq One Reagent (targeting oligo panel)
- 2. Amp-Seq One Amplification Master Mix (5X)
- 3. Amp-Seq One Buffer
- 4. Amp-Seq One Bead Cleaning Solution

Order now

Order no.	Pre-designed panel name	Reactions
GEN-9910-384-5566	Amp-Seq One industry standard bovine ICAR+ 0.6K panel	384
GEN-9910-3840-5566	Amp-Seq One industry standard bovine ICAR+ 0.6K panel	3840
GEN-9910-384N-5566	Amp-Seq One for Nexar industry standard bovine ICAR+ 0.6K panel	384
GEN-9910-3840N-5566	Amp-Seq One for Nexar industry standard bovine ICAR+ 0.6K panel	3840



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