



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 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 [SNP list for this panel](#).

Recommended sequencing depth and chemistry

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

All SNPs were designed for recovery with a minimum of single end 100 bp sequencing. Longer read lengths or paired end sequence are fully compatible.

Breed validation

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

Data analysis

LGC Biosearch Technologies' BiosearchCaller 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.

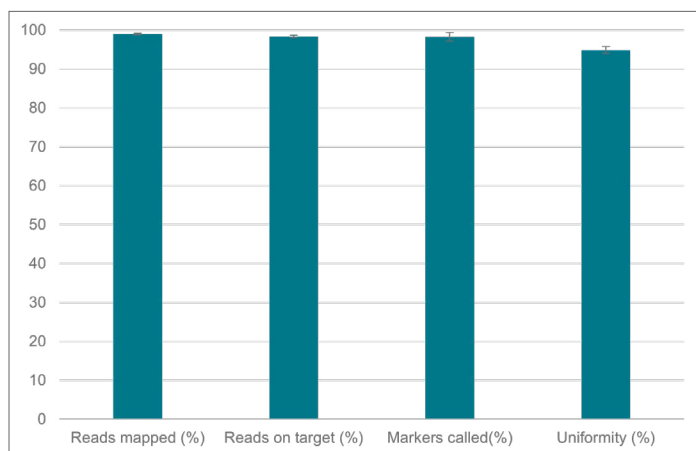


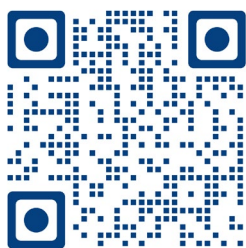
Figure 1. Core performance metrics for the ICAR+ 0.6K panel, illustrating high quality sequencing results obtained for Amp-Seq One for 384-samples, including 22 ISAG samples for panel validation. 1 μ M primers were used and DNA normalised to 5 ng total input.

Kit components

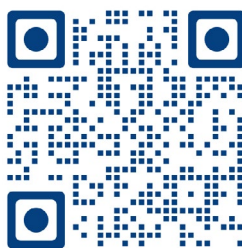
1. Amp-Seq One Reagent (targeting oligo panel)
2. Amp-Seq One Amplification Master Mix (5X)
3. Amp-Seq One Buffer
4. Amp-Seq One Bead Cleaning Solution

Order now

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



[More information](#)



[Order now](#)

[@LGCBiosearch](#) | [biosearchtech.com](#)

All trademarks and registered trademarks mentioned herein are the property of their respective owners. All other trademarks and registered trademarks are the property of LGC and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording or any retrieval system, without the written permission of the copyright holder. © LGC Limited, 2025. All rights reserved. GEN/1225/LH/0525

BIOSEARCH™
TECHNOLOGIES