

## Certificate of analysis

### Description

**Library name:** PRCISR™ CRISPR Alexandria fixed-pair mouse genome-wide CRISPRko library

**Product number:** LGW202

**Lot number:** 11100

### Quality control steps

- Sanger sequencing of sgRNA cassettes
- Full-plasmid sequencing of the final library
- Restriction digest of library on agarose gel
- NGS sequencing

### Key statistics

**Plasmid size:** 9,124 bp

**sgRNA representation:** 44,672 of 44,756 sgRNA pairs, 99.8% complete

**Skew (90/10):** 1.70

### Sanger sequencing

Insertion of the sgRNA cassettes was confirmed by Sanger sequencing.

### Full plasmid sequencing

Full plasmid sequencing confirmed the backbone sequence and a plasmid size of 9,124 base pairs.

## Restriction digest

The restriction digest shows the addition of the library in the PacI/I-SceI sites, removing those sites, and the insertion of the tracrRNA sequences with an EcoRI site in the original Esp3I site.

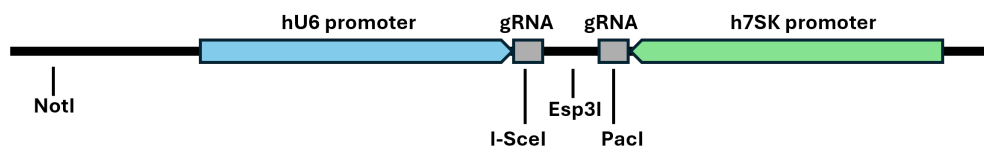


Figure 1. Fixed-pair backbone.

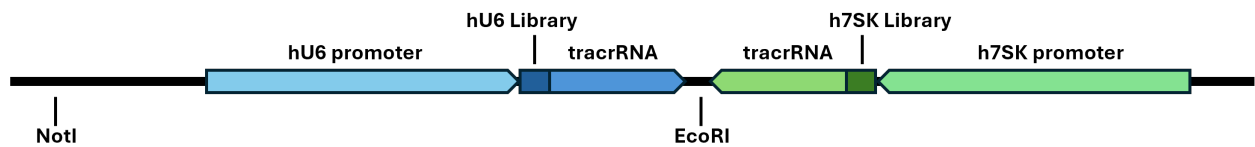
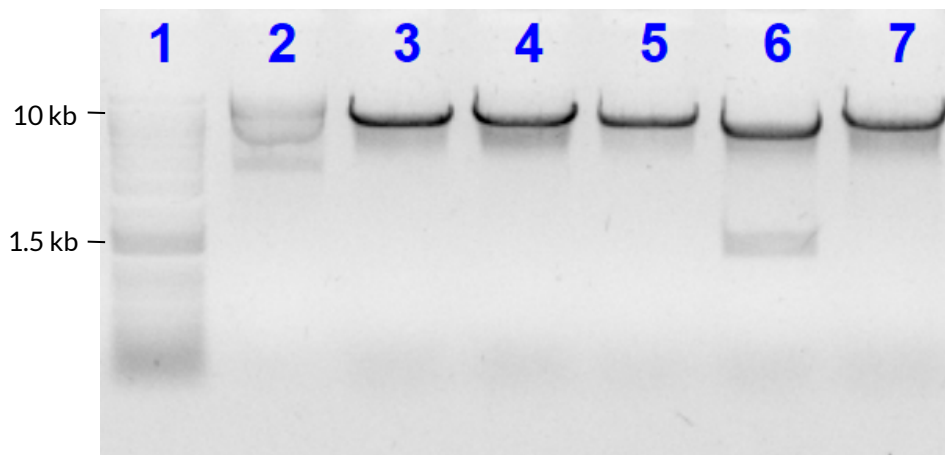


Figure 2. Fixed-pair library.



### Legend

1. 1kb+ ladder
2. Undigested
3. NotI
4. NotI and PacI
5. NotI and I-SceI
6. NotI and EcoRI
7. NotI and Esp3I

Figure 3. Restriction digest of the final library.

## NGS sequencing

The library has been sequenced with an Illumina MiSeq sequencer at >250x coverage:

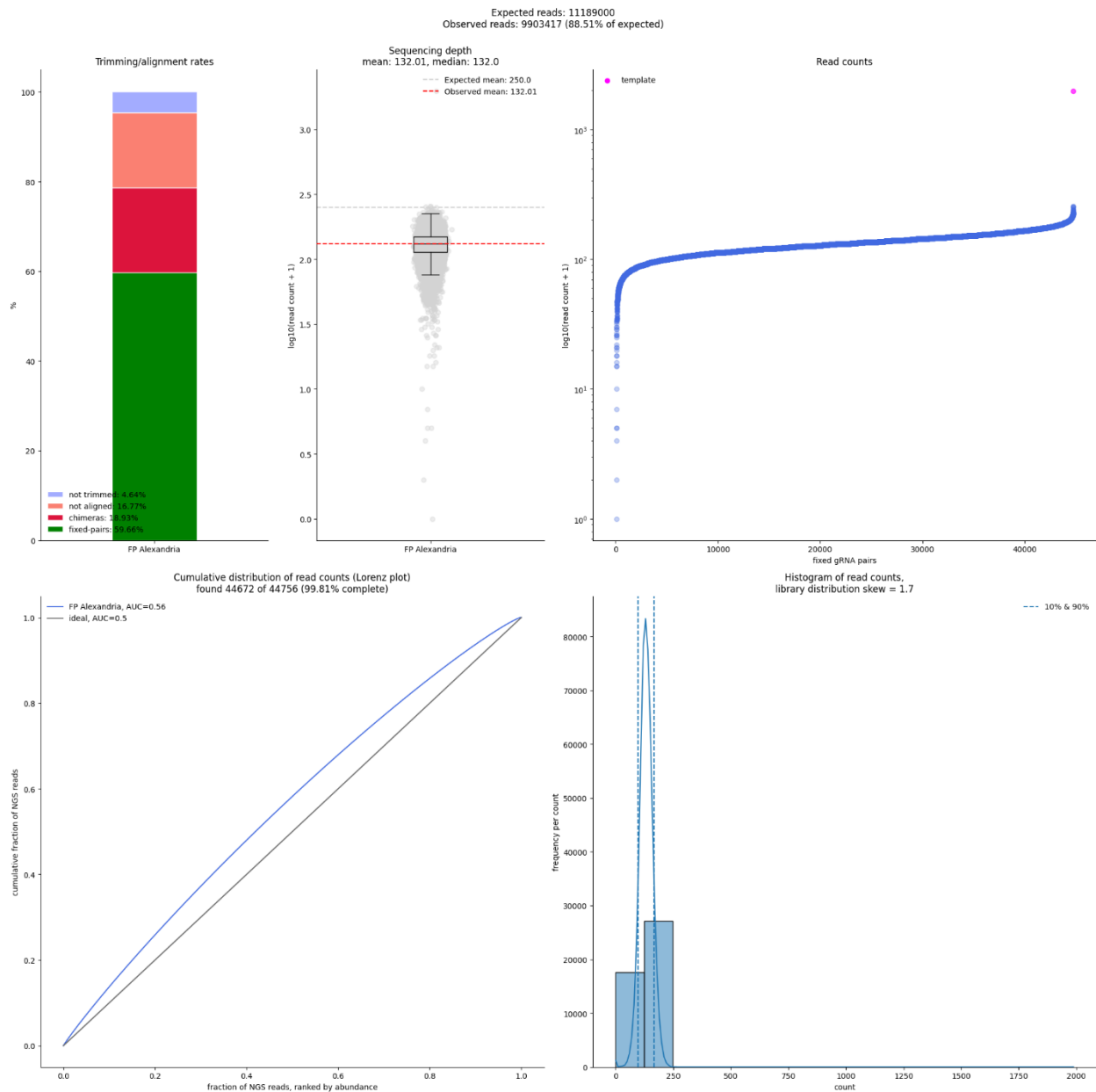


Figure 4. Quality control of sequencing data. Sequencing depth, read counts, and library distribution results.

The contents of this product have been tested according to the above specifications and met all quality control standards.

A handwritten signature in black ink, appearing to read "M. Wegner".

Martin Wegner, Head of R&D and Customer Solutions

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**Version: 17.02.2025**