

Certificate of analysis

Description

Library name: PRCISR™ CRISPR Alexandria fixed-pair human genome-wide CRISPRko library
Product number: LGW201
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: 41,949 of 41,951 sgRNA pairs, 100% complete
Skew (90/10): 2.22

Sanger sequencing

Insertion of the gRNA 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.

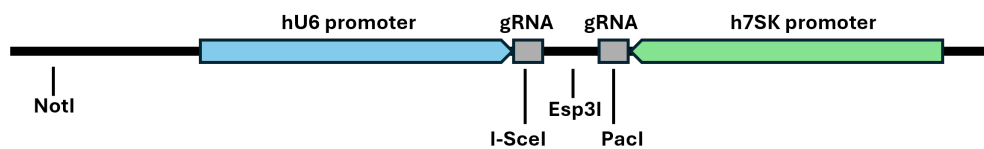


Figure 1. Fixed-pair backbone.

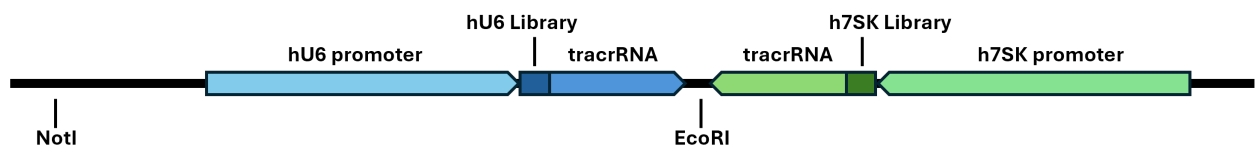
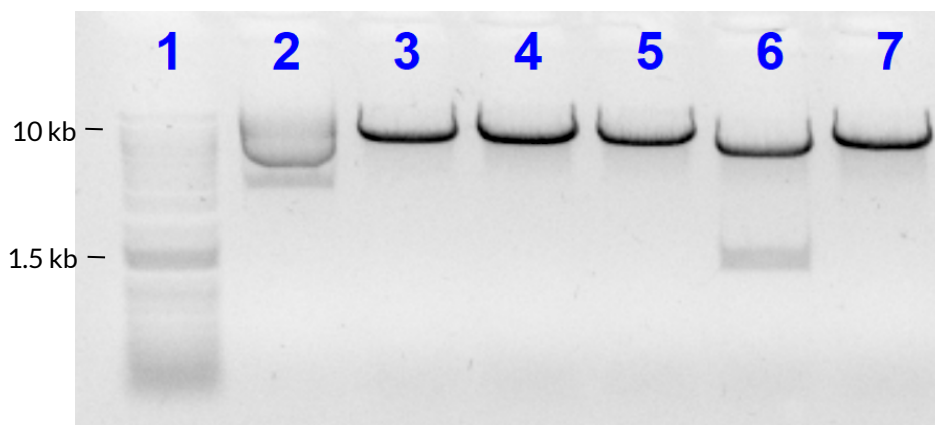


Figure 2. Fixed-pair library.



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:

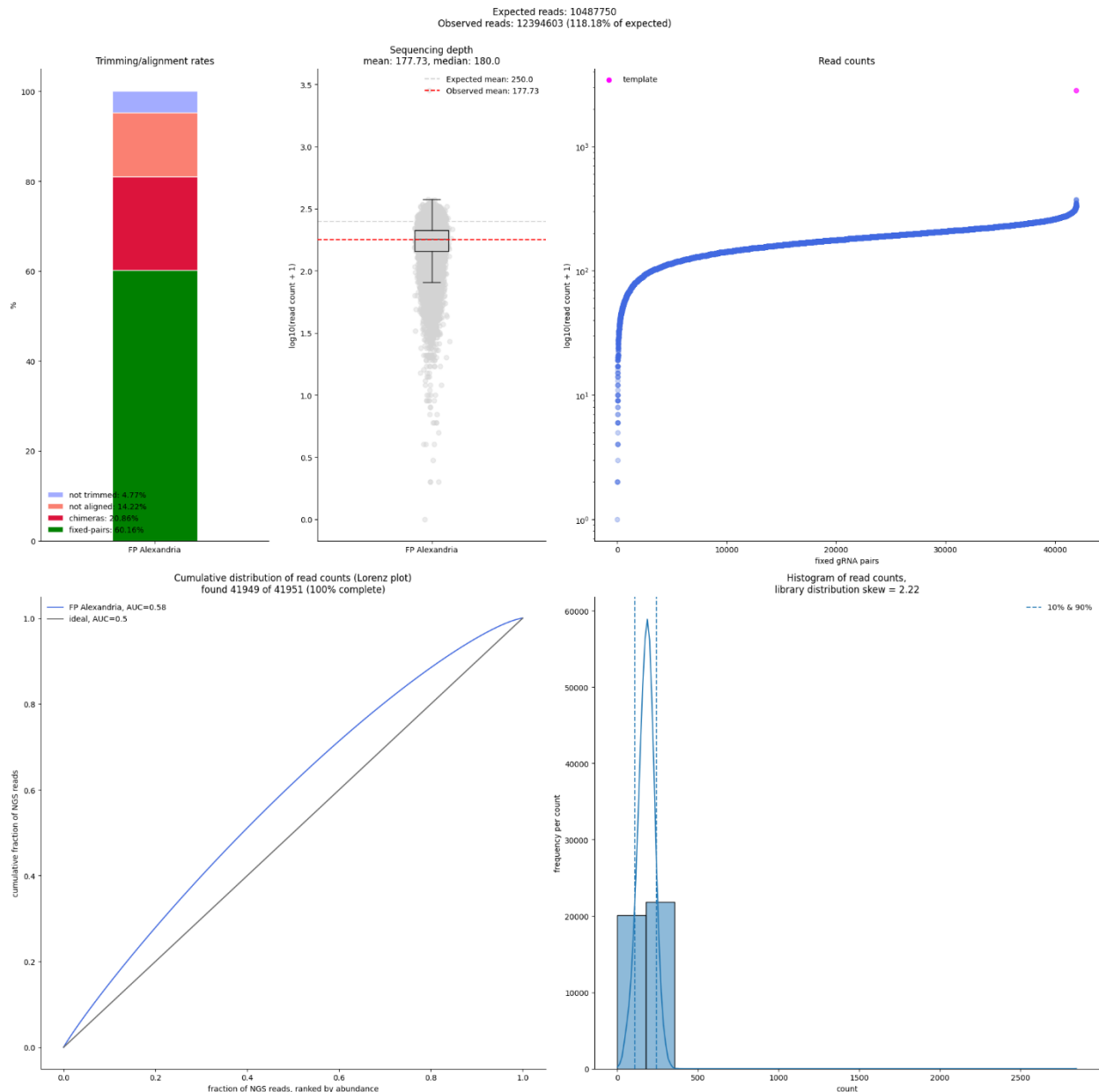


Figure 4. Quality control of sequencing data. Sequencing depth, read counts, and library distribution results.

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

Version: 17.02.2025