

Certificate of analysis

Description

Library name: PRCISR™ CRISPR Alexandria single-targeting human genome-wide CRISPRko library

Product number: LGW101

Lot number: 12000

Quality control steps

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

Key statistics

Plasmid size: 9,444 bp

sgRNA representation: 83,547 of 83,550 sgRNAs, 100% complete

Skew (90/10): 1.62

Sanger sequencing

Insertion of the sgRNA cassette was confirmed by Sanger sequencing.

Full plasmid sequencing

Full plasmid sequencing confirmed the backbone sequence and a plasmid size of 9,444 base pairs.

Restriction digest

The restriction digest shows the addition of the library in the *PacI* site (h7SK promoter), removing the site. The *I-SceI* site remains intact.

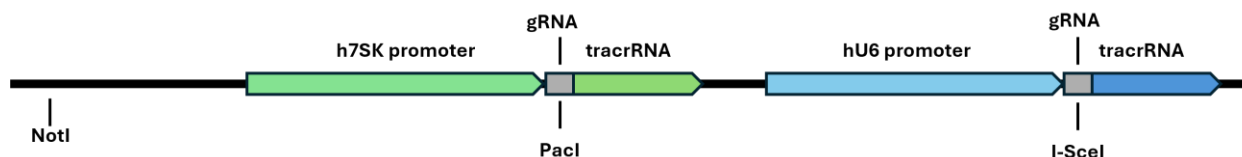
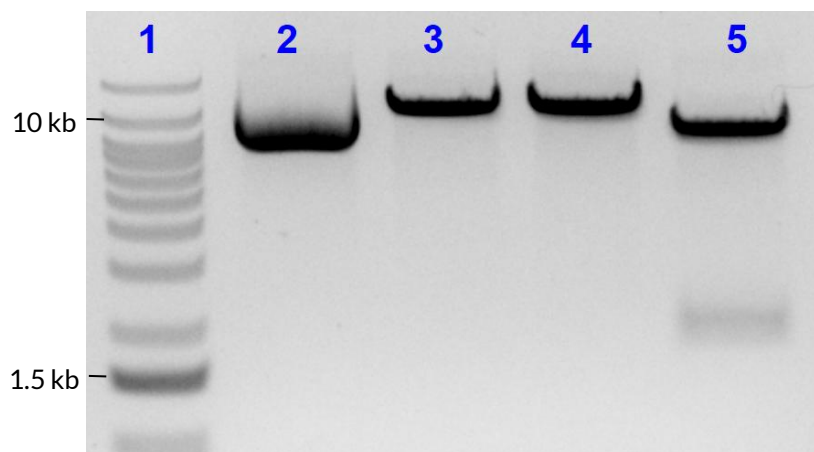


Figure 1. Multiplex backbone.



Figure 2. Single-targeting library, h7SK promoter.



Legend

1. 1kb+ ladder
2. Undigested
3. NotI
4. NotI and *PacI*
5. NotI and *I-SceI*

Figure 3. Restriction digest of the final library.

NGS sequencing

The library has been sequenced with an Illumina MiSeq sequencer at >200x coverage:

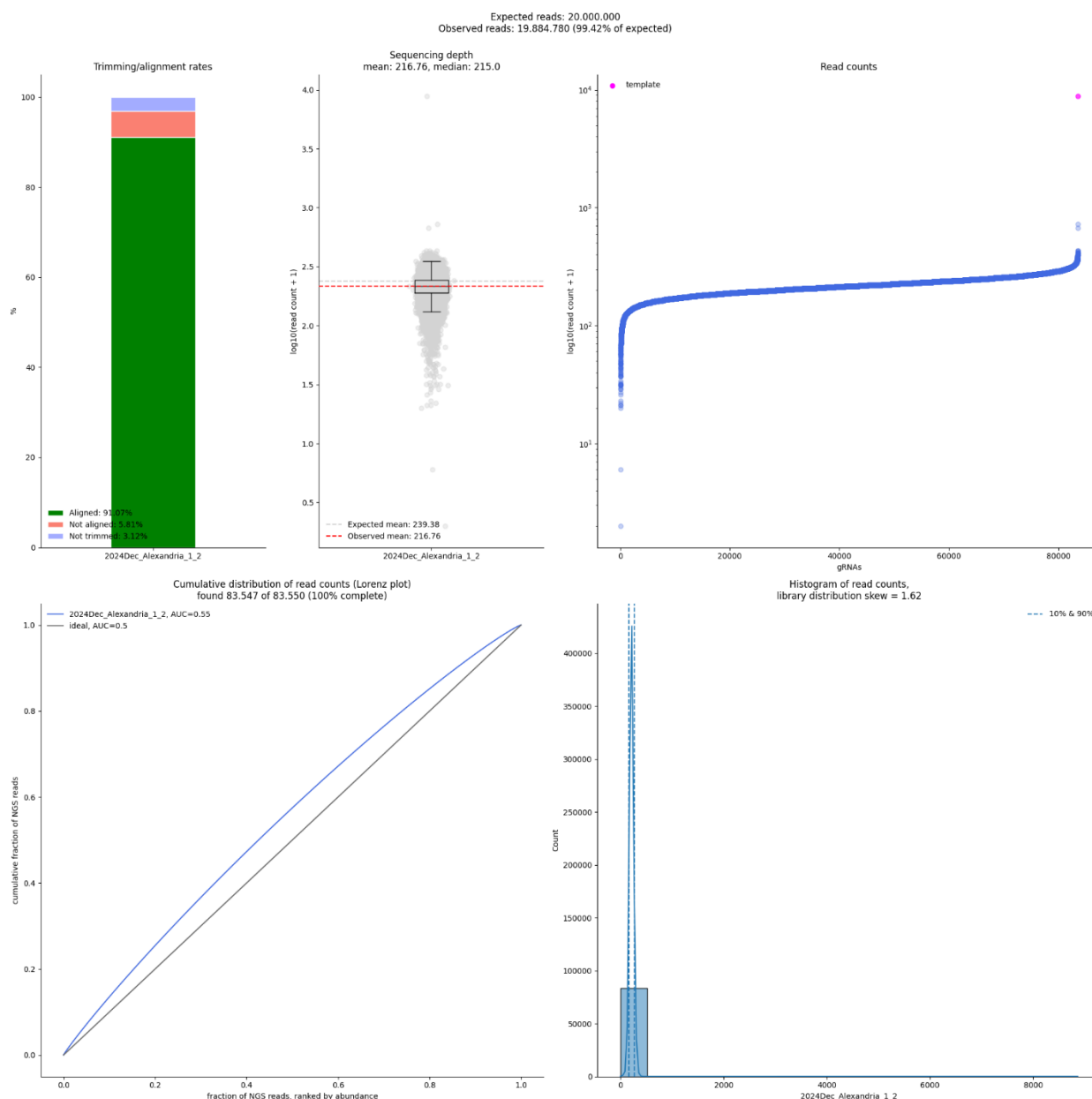


Figure 4. Quality control of sequencing data. Sequencing depth, read counts, and library distribution results.

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