

# Library Construction

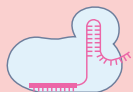
- Extensive experience in designing and constructing high-complexity pooled libraries
- Delivering custom libraries in ***as fast as 6 weeks***



## Custom Library Construction Services

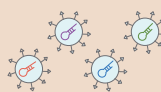
Starting from \$2,300

### CRISPR Library



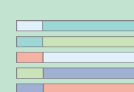
- Various CRISPR technologies
- >98% coverage of designed gRNAs

### shRNA Library



- Wide range of complexity
- >98% coverage of designed shRNAs

### Barcode Library



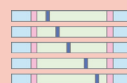
- >10<sup>8</sup> diversity
- High uniformity and unbiased nucleotide distribution

### Enhancer/ Promoter Library



- High signal-to-noise ratio
- Incorporation of barcode and reporter

### Mutation Library



- >10<sup>8</sup> complexity
- Diverse approaches

### AAV Capsid Library



- High complexity
- In vivo screening including NHP

## Premade Pooled Libraries

Starting from \$1,999

### CRISPR Lentivirus Libraries Offered

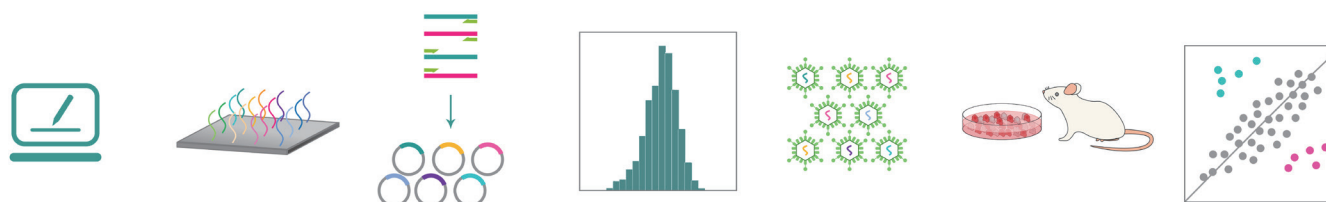


- Whole-Genome CRISPR KO / CRISPRa / CRISPRi Libraries
- Pathway-Specific CRISPR KO Libraries

### shRNA Lentivirus Libraries Offered



- Mouse Elite Gene / Whole-Genome Libraries
- Human Elite Gene / Whole-Genome Libraries



Library design

Oligo synthesis

Library cloning

NGS validation

Virus  
packaging of  
pooled library

In vitro or in  
vivo screening

NGS  
deconvolution

1-4 days

2-3 weeks

2-3 weeks

1-2 weeks

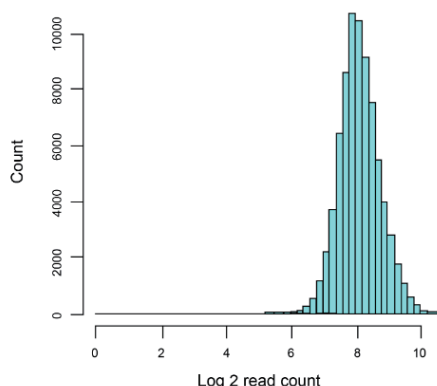
1-2 weeks

3-5 weeks

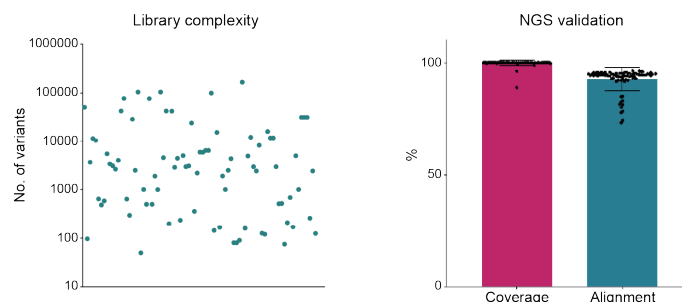
As fast as 6 weeks

## Case Study

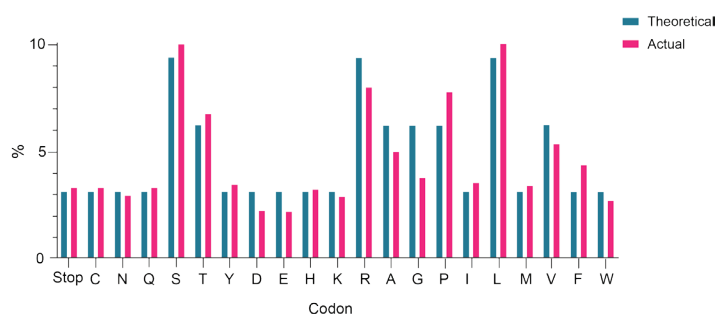
### Even Distribution of gRNAs



### High Complexity and Coverage



### Highly Precise Variants



### Balanced Nucleotide Frequency

