



Pooled Lentiviral RNAi & CRISPR Libraries



CELLECTA

Pooled lentiviral-based libraries allow you to assay the effects of many thousands of effector constructs simultaneously in one experiment. Producing a reliable and effective screening tool with such complexity requires considerable expertise. Cellecta has extensively optimized library construction protocols and has overcome a number of technical challenges to produce quality effector libraries. Over the last several years, we have built and tested over 400 shRNA, CRISPR, and other effector libraries.

High-Quality Pooled RNAi & CRISPR Screening Libraries

- **Flexible** array-based oligonucleotide synthesis enables rapid creation of complex libraries expressing any set of shRNAs or sgRNA to any targets
- **Optimized** shRNA / sgRNA expression vectors with various markers, selections and both inducible and constitutive promoters
- Lentiviral-based system ensures **efficient** delivery of high complexity, pooled libraries into a wide range of cell types
- Internal non-targeting negative controls and positive dropout controls ensure **robust** screening analysis

Exceptional Oligonucleotides

- Synthesized using microarray-based oligonucleotide synthesis platform
- **Minimal mutation rate** (typically ~0.2%)
- Each oligo sequence in pool is fully defined without randomizations
- Solid support synthesis **minimizes bias** by providing similar yields of each individual oligonucleotide

Range of Well-Designed Vectors

- Lentiviral shRNA and sgRNA cloning vectors provide efficient delivery of complex libraries into a wide range of cell types
- Constitutive or tet-regulated promoters for expression of shRNA or sgRNA
- Single or dual selection marker (GFP, RFP, PuroR, BleoR, NeoR, HygroR, etc.) expressed from a single CMV, hEF1a, hUbiC, hPGK, or other promoter.



