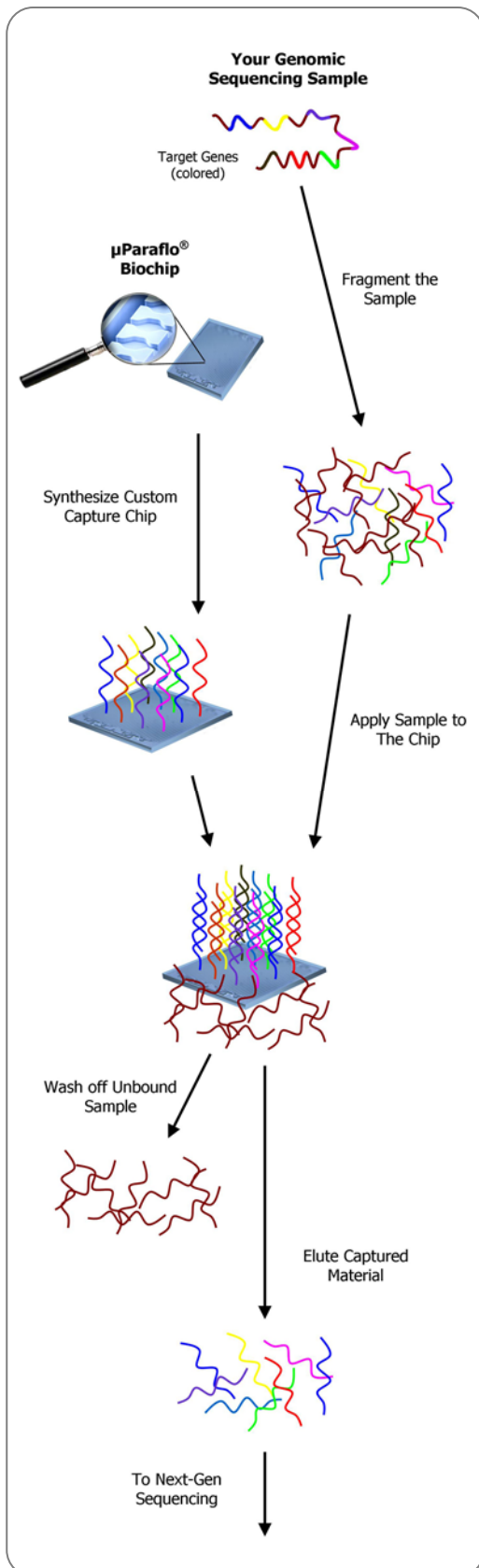


Targeted Sequencing - Sample Enrichment Service



Take Full Advantage of Next Generation Sequencing

LC Sciences provides a service for target-specific selection of customer defined genomic region. This service enables you to take full advantage of new "next-generation" high throughput sequencing technologies. More complete and accurate coverage is achieved by targeting only your regions of interest. We offer broad coverage of genomics species - design and synthesis are based on a programmable digital platform. There is no limit on your specifications - any species - any genomic region - contiguous or dispersed, small or large probe sets.

On Chip Sequence Capture

LC Sciences' µParaflo® biochip products are particularly well suited to provide target-specific sequence selection solutions. Our high-density microfluidics chips enable massively parallel synthesis of target-specific, selection optimized oligonucleotides (probes) on-chip. Standard oligo synthesis chemistry and advance microfluidics design ensure high quality synthesis. The µParaflo® biochips are used to select targets from genomic samples by directly applying to the biochip via microfluidics for on-chip sequence capture. Enriched targeted regions are recovered, ready for sequencing.

Sequence Capture Service

- Ship us your fragmented genomic samples.
- Service includes: QC of your sample, microarray synthesis, sample hybridization, sequence recovery, duplex PCR and QC of final product.
- Receive fully duplexed quality control tested final product ready for high-throughput sequencing.

Advantages

- Take full advantage of new "next-generation" high throughput sequencing technologies - Complete / more accurate coverage is achieved by targeting only genomic regions of interest.
- Broad coverage of genomics species - Design and synthesis are based on a programmable digital platform. There is no limit on your specifications - any species - any genomic region - contiguous or dispersed, small or large probe sets.
- Flexible probe design to meet your needs - Genomic region selection, specific subset of genes or sequences, optimization for copy uniformity, etc. are achieved by high quality probes.
- Enhanced data quality and detectability - Target only customer defined genetic elements (often representing only 1/1000 of a total genomic sample) to generate well-focused and revealing data for low abundant sequences.

Applications

- Target-specific selection of genomic DNA for a defined region (such as suspected cancer regions, SNP regions, regions for genomic comparisons).
- Target-specific selection of RNA sequences, such as sets of transcriptome sequences known from previous screening experiments, mRNAs, and miRNAs.
- General use of the capture probes on microarray for enrichment or depletion of certain sequences, such as depletion of those which interfere with sequencing reactions or high abundance repeating sequences.
- Purification of the sequences to enable multiplexing, high coverage, and high dynamic range sequencing.