

illumina Custom Product Services

Eliminate time-consuming assay design with Illumina Custom Product Services—the experts in custom targeted resequencing and custom microarray design and optimization.

Highlights

- Enhance custom sequencing and microarray design**
 Access designs, probes, and species not available through off-the-shelf products for custom targeted resequencing and custom microarrays
- Access wet lab testing and optimization**
 Achieve high coverage uniformity across target regions through wet lab testing and optimization
- Save time with Illumina assay design experts**
 Gain confidence in custom targeted resequencing or custom microarray designs

Introduction

Recent innovations in next-generation sequencing (NGS) and microarray technology have accelerated research in a wide range of applications. These applications include microbial genetics, agrigenomics, population studies, pharmacogenomics, hereditary cancer, cardiovascular disease, and more. Due to this broad and ever-expanding range of research interests, some researchers find that pre-configured content panels do not meet their needs or fit well with specific aspects of their workflows. Researchers who must design their own assays may be faced with several challenges, including learning new assay design best practices and investing significant time in the custom design and assay optimization phase of their studies.

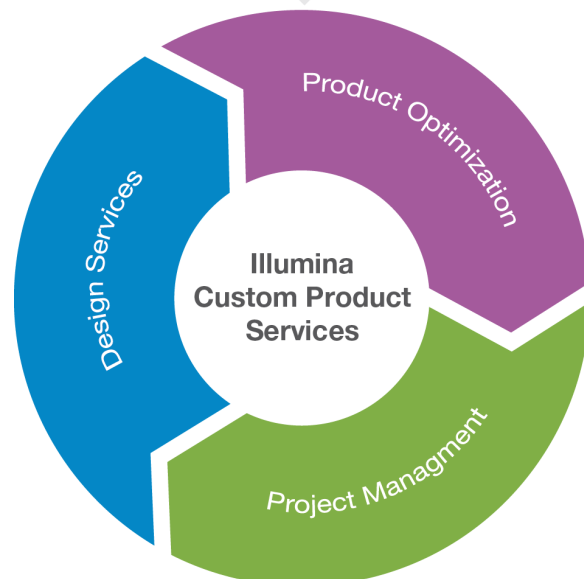
To address these challenges, Illumina Custom Product Services offers custom design and product optimization services:

- Illumina Custom Product Design Services**— Offers *in silico* design of custom targeted sequencing and microarray products.
- Illumina Wet Lab Testing and Optimization Services**— Offers functional wet lab testing for custom targeted sequencing products.

If a given study requires custom probes or the investigation of species not supported through off-the-shelf products, working with the dedicated scientists at Illumina Custom Product Services can save weeks of time designing and optimizing custom assays. With functional Wet Lab Testing and Optimization Services, scientists at Custom Product Services will assist in testing and maximizing the performance of targeted sequencing panels (Figure 1).

Enabling Successful Custom Design

Custom Product Design—
for custom targeted sequencing and microarray products
Wet Lab Testing and Optimization—
for targeted sequencing panels



Dedicated, Expert Project Managers

Custom Product Services Project Managers are experienced Illumina scientists that support customer success through custom design and product optimization

Figure 1: Illumina Custom Product Services summary—Through expert design, product optimization, and dedicated product management, Custom Product Services supports successful custom assay design for unique study requirements.

Illumina Custom Product Design Services

Custom Product Design Services are available for both targeted sequencing and microarray products. The services cover the creation and optimization of custom designs using strategies to improve *in silico* coverage of custom content or strategies to provide assay design configurations beyond the parameters and species supported through DesignStudio™ Software. The customer will work with a dedicated Illumina scientist from the Custom Product Services team to discuss and implement design requirements (Figure 2). A range of Illumina kits are supported with Custom Product Design Services, including Custom and Semi-Custom Infinium™ iSelect Kits, AmpliSeq™ for Illumina, Nextera™ Flex for Enrichment, and more (Table 1).

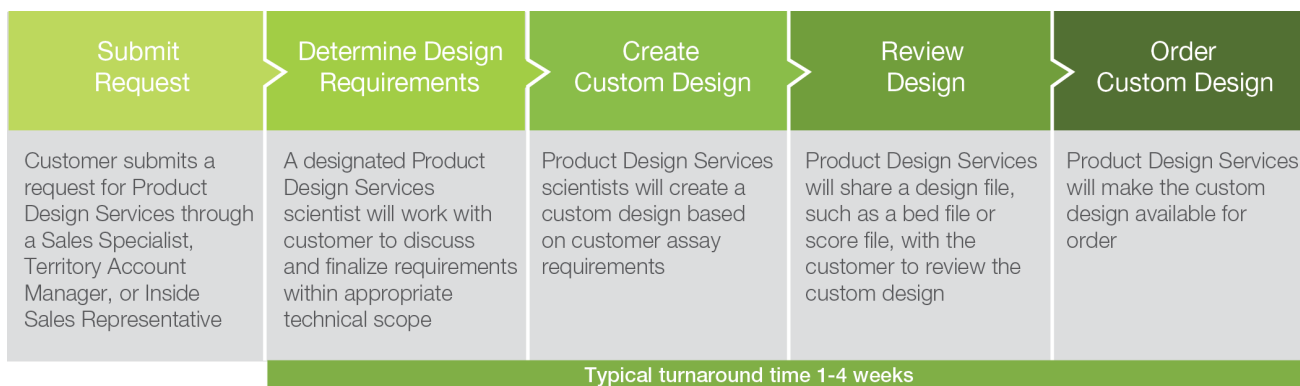


Figure 2: Illumina Custom Product Design Services—Customers will work with a dedicated Illumina scientist to discuss design requirements. Typical turnaround time is 1–4 weeks from time of confirmation of custom design requirements and can vary depending on complexity of the design.

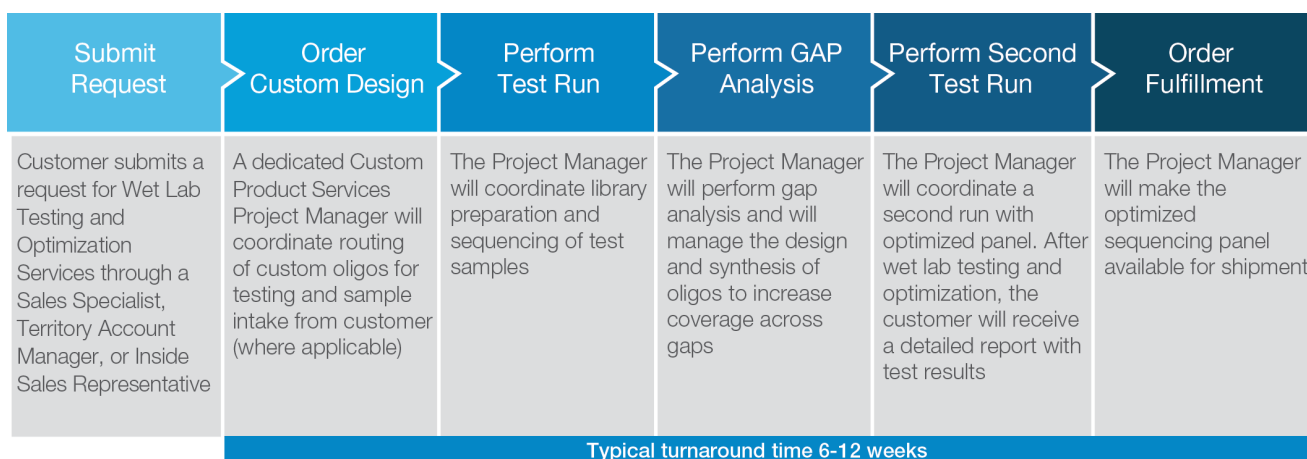


Figure 3: Illumina Wet Lab Testing and Optimization Services—Customers will receive a functionally optimized custom targeted sequencing panel and a comprehensive report of test data. (Raw data is available upon request.) Typical turnaround time is 6–12 weeks from the time of ordering custom panel and can vary depending on complexity of the project.

Table 1: Illumina Custom Product Design Services

Supported Illumina kits
Custom and Semi-Custom Infinium iSelect
Custom and Semi-Custom Infinium Methylation
AmpliSeq for Illumina
Nextera Flex for Enrichment
Nextera Rapid Capture
TruSeq™ Genotype Ne
TruSeq Targeted RNA Expression

panels targeting human DNA as well as non-human species. Supported Illumina library kits include Nextera Flex for Enrichment, Nextera Rapid Capture, and more (Table 2).

Table 2: Illumina Wet Lab Testing and Optimization Services

Supported Illumina kits
Nextera Flex for Enrichment
Nextera Rapid Capture
TruSeq Genotype Ne

Illumina Wet Lab Testing and Optimization Services

Wet Lab Testing and Optimization Services are available for custom targeted DNA sequencing panels and aim to improve coverage uniformity. A dedicated project manager will be assigned to manage testing, oligo synthesis, and communication with the customer (Figure 3). This service is offered for both new and existing (reordered) custom sequencing panels, and applies to

Summary

Illumina Custom Product Services provides valuable, comprehensive services for the design and optimization of custom targeted sequencing panels and custom microarrays. Customers in need of novel, custom solutions can rely on the expertise and dedication of the Custom Product Services Team. Let the experts at Illumina Custom Product Services eliminate weeks from your research time line, allowing you to accelerate your studies and uncover important biological insights.

Ordering information

To place an order or learn more about Illumina Custom Product Services, contact your local Illumina Account Manager or contact Illumina Customer Solutions within the United States at 1.800.809.4566 ext.1 or outside the United States at 1.858.202.4566.

Products	Catalog no.
Illumina Custom Product Design Services	20015529
Illumina Wet Lab Testing and Optimization Services	20015541

Illumina Global Professional Services

To support instrument productivity, operational efficiency, and customer success, Illumina Global Professional Services includes a suite of services that support customers through the entire Illumina sequencing or microarray workflow. From library preparation trainings, to ongoing instrument support, and advanced informatics solutions, Global Professional Services is here to help. Support offerings include:

Education & Certification Services



Provides Illumina certifications and trainings to support and validate customer excellence in next-generation sequencing technology

Custom Product Services



Provides custom assay design and product optimization services for custom targeted sequencing or custom microarray products

Laboratory Services



The Illumina Solutions Center provides complete workflow designs and trial runs to customers evaluating Illumina technology

Informatics Services



Offers consulting services for simple to complex data analysis by leveraging Illumina software expertise and best-in-class open-source software

Operational Services



Provides laboratory operations solutions for both regulated and nonregulated, high-throughput, sequencing and microarray laboratories

To learn more, visit [Illumina Global Professional Services](#).