

Planning for a TruSight™ One Sequencing Panel Project



This quick reference card contains steps to help you plan your TruSight One Sequencing Panel project.

- Use the links in each section for quick access to tools, more information, and suggested resources.
- Use the interactive text fields to record estimated sequencing coverage, materials to order, related training and webinars, and project timelines.

1 Planning

- Visit the [Publications Tracker](#) for publications on a wide range of genetic applications.

Depth of Coverage

- See [Estimating Sequencing Coverage Tech Note](#) for information about depth of sequencing before calculating desired coverage.
- Use the [Coverage Calculator](#) to calculate coverage estimates.

Genome or region size:	*12,000,000 bp
Coverage:	
Total number of cycles:	300 (2x151 runs + indexing)
Total output required:	
Samples per lane:**	

*Estimated total region size of targeted content

** Depending on number of samples pooled per enrichment. Illumina recommends 6.4 million reads per sample = 95% of targets covered at 20x minimum, assuming > 50% enrichment

2 Ordering

- Visit the [TruSight One Sequencing Panel product page](#) on the Illumina website to place your order.

Kit Name †	Catalog #
TruSight One Sequencing Panel (9 samples)	FC-141-1006 (MiSeq reagents included)
TruSight One Sequencing Panel (36 samples)	FC-141-1007 (library prep only)
TG TruSight One Sequencing Panel (9 samples) ††	TG-141-1006 (MiSeq reagents included)
TG TruSight One Sequencing Panel (36 samples) ††	TG-141-1007 (library prep only)

3 Getting Started

User-Supplied Materials

- See [Consumables and Equipment](#) section of the latest [User Guide](#) for a list of user-supplied materials.

Items to order:

Web-Based Training

- Visit the [Illumina web-based training page](#) for a list of upcoming online training courses.

Courses to take:

Instructor Led Training

- Visit the [Illumina instructor-led training page](#) for a list of upcoming instructor-led training courses.

Webinars

- Visit the [Illumina webinar page](#) for a list of upcoming webinars.

† Research Use Only. 9 sample kit supports 3 samples per enrichment; 36 sample kit supports 12 samples per enrichment

†† TG-labeled consumables have features that help customers reduce the frequency of revalidation. These consumables are available only under supply agreement and require customers to provide a binding forecast. Contact your account manager for more information

4 Finding Support

Documentation

- [TruSight One Sequencing Panel Library Prep Guide](#)
- [TruSight One Sequencing Panel Lab Tracking Form](#)
- [IEM TruSight One Sequencing Panel and TruSight Rapid Capture Quick Reference Card](#)

TruSight One Sequencing Panel Support Page

- Visit the [TruSight One Sequencing Panel support page](#) for quick access to the latest updates, downloads, frequently asked questions, information about input requirements, kit contents, and storage requirements.

5 Best Practices

- Assess DNA input quantity and quality as recommended.
- Quantification is key for enrichment pooling and clustering. Use dsDNA detection methods.
- Illumina recommends performing 2 x 151 runs (with indexing) and analyzing with enrichment workflows.
- The wash steps[§] ensure high enrichment specificity. Issues with the wash steps can result in low or no yield or low % enrichment.^{§§}

[§]Proper resuspension of the beads during enrichment washes reduce non-specific binding.

^{§§}Make sure that you use a microheating system set to 50°C (recommended) or a thermal cycler set to 42°C with the heated lid to maintain correct temperatures.

6 Project Timeline

Activity	Date
Order and receive kits (allow 2–3 weeks)	
Gather and prepare samples	
Perform TruSight One Sequencing Panel assay (allow 2–3 days)	
Sequence samples on MiSeq (allow 2–3 days)	
Perform analysis	