

Twist Custom Blended Panels

Custom blended panels with NGS QC for reliable performance

KEY BENEFITS

Exceptional, Consistent Performance

- Effective design, accurate synthesis, and detailed quality control maximize both capture uniformity and reproducibility
- High-fidelity double-stranded DNA probes offer high-quality, consistent performance

Tunable Coverage

- Adjustable coverage of ingredient panels without sacrificing performance
- Fast turnaround time to final panel

Blended Panels with NGS QC

- In-house blending of the panel before shipment, thus preventing blending overburden
- NGS-based quality control of all probes ensures balanced probe representation and minimizes dropout

At Twist Bioscience, we generate high-performing panels for NGS target enrichment by combining precise oligonucleotide synthesis with a scalable silicon-based manufacturing platform. We complement this powerful technology with proprietary design algorithms and a rapid iteration pipeline to enable the quick design, synthesis, and optimization of custom panels.

Twist Custom Blended Panels can be designed to cover a wide range of panel sizes, ratios, target regions, and multiplexing requirements — all with exceptional and consistent performance following our NGS quality control. Whether you design your own panel from scratch or add targets to enhance the content of existing panels, you can use your Custom Blended Panels with Twist's modular library preparation kits or seamlessly integrate them into an existing workflow.

CUSTOM PANELS	TWIST	COMPETITOR 1	COMPETITOR 2
Custom probes optimized for any size	X	X	X
Cater to custom production scales	X	X	X
NGS QC of panel	X	X	—
Pre-blend multiple panels	X	—	—

Table 1. Create custom panels with confidence by taking advantage of Twist's NGS quality control. We will also pre-blend multiple panels for you, saving you time and guaranteeing high-quality performance

Adding the additional content can be done in two ways:

- Expanded Content:** Add additional target regions that walk along the footprint of the genome. The secondary panel is pre-balanced for even uniformity when spiked-in with the primary panel.
- Enhanced Content:** Boost existing content over the baseline for greater target sensitivity already included in the primary panel. This is commonly done with somatic mutations such as CNV or large structural variants. The enhanced content can be blended from 0.1x–10x coverage against the baseline.

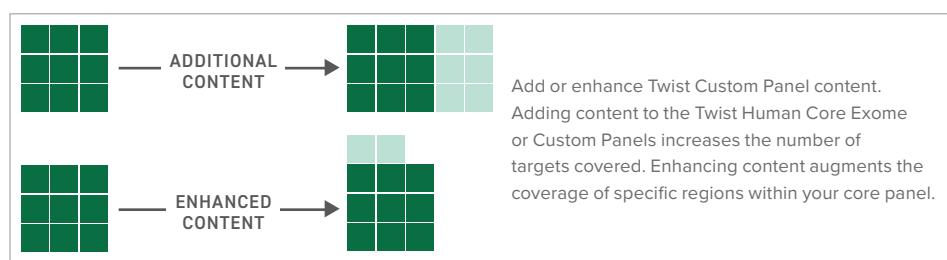


Figure 1. Add additional content to existing panels to increase coverage or enhance existing content to boost coverage 0.1x–10x against the baseline.

By working with Twist Bioscience, not only will your panel contain scalable, optimized custom probes, but it will also pass our NGS quality control step. We can pre-blend multiple panels for you, saving you time while guaranteeing high-quality performance and analysis. We test for fidelity of the data as it comes out of the sequencers so you can rest assured that it is of high quality and aligns with what you expect.

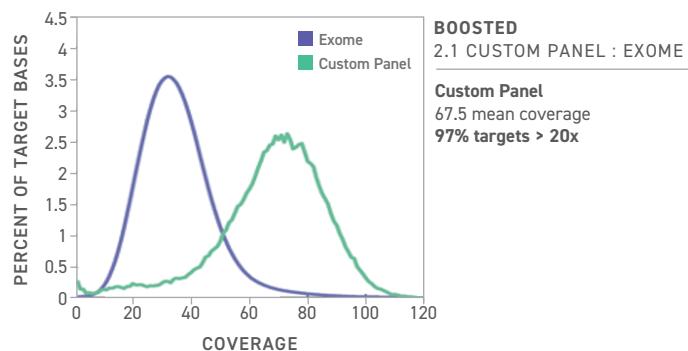
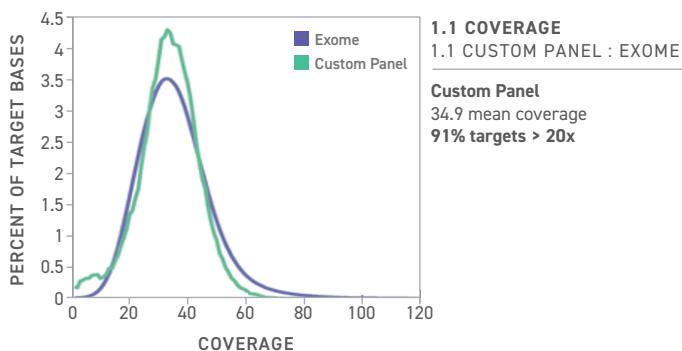
EXOME (33.1 Mb) + CUSTOM PANEL (0.12 Mb)
2.8 Gb SEQUENCING/SAMPLE


Figure 2. Blend multiple panels at the desired ratio to take advantage of tunable coverage. Boosted panels show performance of spike-ins and offer great performance for a wide range of coverage possibilities.

PART NUMBER	NAME	SPECIES
102981	Twist Human Custom Core Exome, 12 Reactions	Human
102982	Twist Human Custom Core Exome, 48 Reactions	Human
102983	Twist Human Custom Core Exome, 96 Reactions	Human
102984	Twist Human Custom Core Exome, 192 Reactions	Human
102985	Twist Human Custom Core Exome, 384 Reactions	Human
102986	Twist Human Custom Core Exome, 768 Reactions	Human
102987	Twist Human Custom Core Exome, 1536 Reactions	Human
102988	Twist Human Custom Core Exome, Special	Human
102989	Twist Human Custom Comprehensive Exome, 12 Reactions	Human
102990	Twist Human Custom Comprehensive Exome, 48 Reactions	Human
102991	Twist Human Custom Comprehensive Exome, 96 Reactions	Human
102992	Twist Human Custom Comprehensive Exome, 192 Reactions	Human
102993	Twist Human Custom Comprehensive Exome, 384 Reactions	Human
102994	Twist Human Custom Comprehensive Exome, 768 Reactions	Human
102995	Twist Human Custom Comprehensive Exome, 1536 Reactions	Human
102996	Twist Human Custom Comprehensive Exome, Special	Human
101341	Twist Custom Panel Plus, 12 Reactions	
101342	Twist Custom Panel Plus, 48 Reactions	
101344	Twist Custom Panel Plus, 96 Reactions	
101345	Twist Custom Panel Plus, 192 Reactions	
101346	Twist Custom Panel Plus, 384 Reactions	
101347	Twist Custom Panel Plus, 768 Reactions	
101348	Twist Custom Panel Plus, 1536 Reactions	
101349	Twist Custom Panel Plus, Special	

Whether you need to cover 100 or one million targets, we're ready for your order.

Twist Custom Blended Panels are a component of the Twist portfolio of products for NGS Target Enrichment.

LEARN MORE

twistbioscience.com/ngs
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ORDERING INFORMATION

Simply contact Twist Bioscience at sales@twistbioscience.com for more information