ThruPLEX HV: reliable, consistent data from difficult samples

- Streamlined workflow with high reproducibility
- Robust performance with FFPE and cfDNA
- Accurate detection of rare mutations with molecular tags
- Coverage for a broad range of GC content with microbiome samples
- Unique dual indexes for use on the NovaSeq™ system

Simple workflow: one tube and done

Addition-only steps provide a faster, failproof library prep experience without lengthy bead purifications that cause sample loss and impact data quality. Without hidden steps—like adapter dilution—it is easy to automate, scale, and standardize. Pre-plated, single-use UDI indexes make sample assignment clear for your precious materials. Learn more »
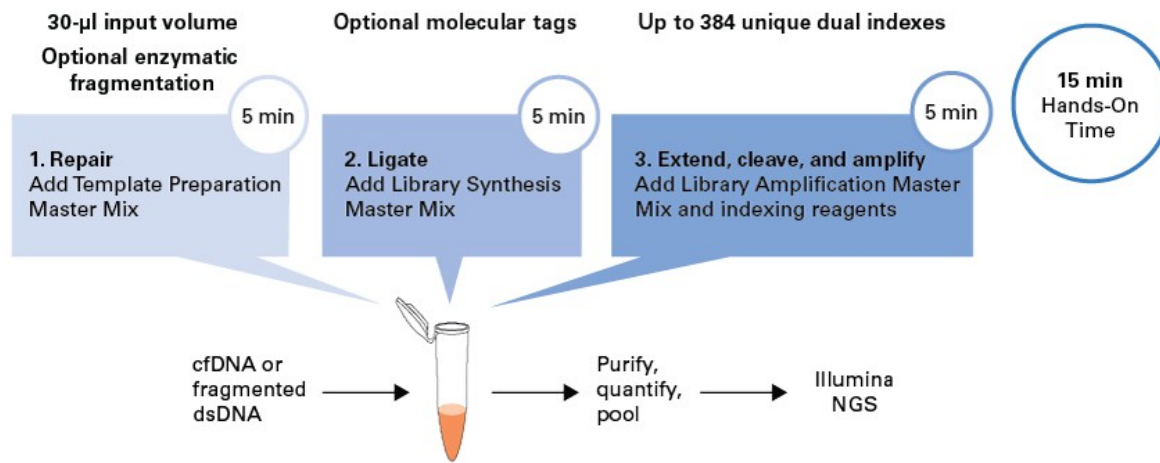

Figure 1. ThruPLEX HV chemistry features a fast, simple workflow without bead purification after ligation—saving time, money, and resources

Reproducible high-quality data from FFPE

Formalin-fixed paraffin-embedded samples are a gold mine of data for understanding disease—if you are equipped to tackle these challenging samples. ThruPLEX HV kits have been optimized to produce high-quality, reproducible data from FFPE tissue. View data »
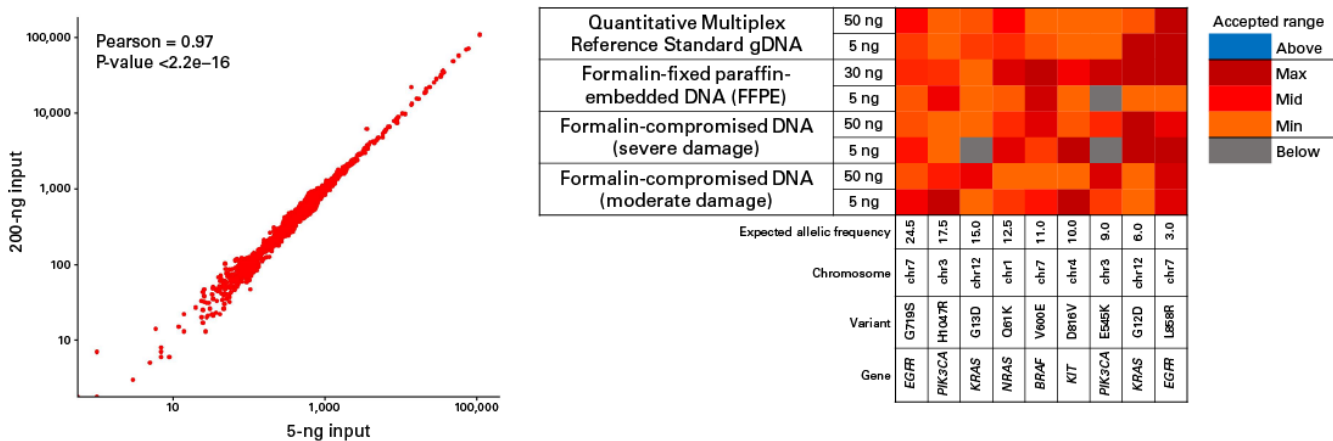

Figure 2. Expect highly reproducible and consistent performance at a broad range of inputs, even for highly degraded FFPE DNA.

Reliably detect low-frequency mutations from cfDNA with molecular tags

Cell-free samples, such as plasma, pose significant challenges to scientists interested in using minimally invasive techniques to look at DNA—especially when the biomarkers of interest are rare. ThruPLEX Tag-Seq HV provides an elegant solution, with chemistry designed to generate complex libraries and molecular tags that enable accurate detection of rare mutations. View data »

Gene	Nucleotide	Amino acid	Cosmic ID	50-ng input						10-ng input					
				WT	WT	5%	5%	1%	1%	WT	WT	5%	5%	1%	1%
EGFR	2573T>G	L858R	COSM6224	0.0%	0.0%	6.5%	5.2%	1.3%	1.5%	0.0%	0.0%	5.7%	5.8%	1.3%	2.
EGFR	2369C>T	T790M	COSM6240	0.0%	0.0%	2.6%	5.6%	0.4%	1.3%	0.0%	0.0%	2.4%	1.9%	1.5%	1.
KRAS	35G>A	G12D	COSM521	0.0%	0.0%	4.0%	3.8%	1.3%	1.6%	0.0%	0.0%	3.5%	3.6%	1.5%	0.
NRAS	181C>A	Q61K	COSM580	0.0%	0.0%	8.6%	5.1%	2.4%	1.7%	0.0%	0.0%	6.4%	5.1%	2.5%	2.
PIK3CA	1633G>A	E545K	COSM763	0.0%	0.0%	4.2%	3.8%	0.9%	1.3%	0.0%	0.0%	4.2%	5.7%	miss	1.

Figure 3. Accurately detect low-frequency mutations with the ThruPLEX Tag-Seq HV system, featuring discrete, balanced molecular tags.

Related products (visit takarabio.com/thruplex-hv-products for additional configurations)

Cat. #	Product	Size	License	Quantity	Details
R400740	ThruPLEX® DNA-Seq HV	96 Rxns	↗	*	⌃

ThruPLEX DNA-Seq HV uses a simple, three-step workflow to generate high-complexity DNA libraries from standard samples and challenging sample sources such as FFPE and cell-free plasma DNA. This product contains reagents for 96 reactions and includes unique dual indexing (UDI) primers.

⌄

Documents	Components	Image Data

Cat. #	Product	Size	License	Quantity	Details
R400741	ThruPLEX® DNA-Seq HV	24 Rxns	↗	*	⌃
R400742	ThruPLEX® Tag-Seq HV	24 Rxns	↗	*	⌃
R400743	ThruPLEX® Tag-Seq HV	96 Rxns	↗	*	⌃

Add to Cart