

ThruPLEX® Tag-Seq FLEX

Catalog Nos.	Amount	Lot Number
R400734	24 rxns	Specified on product label.
R400735	96 rxns	Specified on product label.

Description

ThruPLEX Tag-Seq FLEX combines unique molecular identifiers with our proprietary ThruPLEX chemistry to enable construction of molecularly tagged DNA libraries, starting from up to 30 µl of fragmented double-stranded DNA in a three-step single tube workflow in about two hours. No intermediate purification steps or sample transfers are necessary, preventing handling errors and loss of valuable samples.

The chemistry is optimized for 1–200 ng of fragmented double-stranded DNA to maximize library complexity and to preserve the GC representation of the input DNA.

It has been optimized for use with small fragments of DNA such as cell-free plasma DNA or damaged DNA from formalin-fixed paraffin-embedded (FFPE) tissue. Libraries can be used for whole genome sequencing applications, or targeted sequencing using downstream target enrichment panels.

Pairing ThruPLEX Tag-Seq FLEX with unique dual index (UDI) kits allows for multiplexing of up to 384 NGS-ready libraries. Once purified and quantified, the resulting libraries are ready for Illumina® NGS instruments using standard Illumina sequencing reagents and protocols.

Package Contents

<u>R400734</u> (24 rxns)	<u>R400735</u> (96 rxns)	
10 µl	10 µl	Control Fragmented Human gDNA (5 ng/µl)
140 µl	560 µl	PBT1
30 µl	120 µl	PET1
55 µl	220 µl	SBT1
110 µl	440 µl	SET1
1,250 µl	4 x 1,250 µl	ABT1
55 µl	220 µl	AET1
1,100 µl	1,100 µl	Nuclease-Free Water

Storage Conditions

- Store at –20°C.

Expiration Date

- Specified on product label.

Shipping Conditions

- Dry ice

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Product Documents

Documents for our products are available for download at takarabio.com/manuals

The following documents apply to this product:

- ThruPLEX Tag-Seq FLEX User Manual

Quality Control Data

A sample kit from each lot of ThruPLEX Tag-Seq FLEX has been functionally validated with Unique Dual Index Kit indexing pairs (Takara Bio, Cat. Nos. 634756 & 634752) using 1 ng of Control Fragmented Human gDNA. PCR products were purified with an Agencourt AMPure XP Kit (Beckman Coulter, Part No. A63880, A63881, or A63882) and resuspended in 25 μ l of 10 mM Tris-HCL pH 8.0, 0.1 mM EDTA. The library concentrations were determined using Qubit dsDNA HS Assay Kits (Beckman Coulter, Part No. Q32851 or Q32854) and the library sizes were assessed using an Agilent 2100 Bioanalyzer and a High Sensitivity DNA Kit (Agilent Technologies, Cat. No. 5067-4626). The unique molecular identifier distribution and their sequences were calculated by sequencing the libraries on an Illumina sequencing platform.

Quality Control Testing	
Test Parameter	Result
Library concentration	≥ 25 ng/ μ l
Library size	300–600 bp
Minimum reads/library	1×10^6
% mapped reads to human genome	$\geq 90\%$
% chimera	$\leq 5\%$
UMI dropouts	None
Distribution of 144 UMIs	0.21%–1.18%
UMIs without mismatches	$\geq 95\%$

It is certified that this product meets the above specifications, as reviewed and approved by the Quality Department.

ThruPLEX® Tag-Seq FLEX

CATALOG NOS.

R400734 & R400735

NOTICE TO PURCHASER:

Our products are to be used for **Research Use Only**. They may not be used for any other purpose, including, but not limited to, use in humans, therapeutic or diagnostic use, or commercial use of any kind. Our products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products or to provide a service to third parties without our prior written approval.

Your use of this product is also subject to compliance with the licensing requirements, listed below if applicable, and described on the product's web page at <http://www.takarabio.com>. It is your responsibility to review, understand and adhere to any restrictions imposed by these statements.

STATEMENT 384

This product is protected by U.S. Patents 7,803,550, 8,399,199; 9,598,727, 10,196,686, 10,208,337, and 10,155,942 and corresponding foreign patents. Additional patents are pending. For further license information, please contact a Takara Bio USA licensing representative by email at licensing@takarabio.com.

STATEMENT 438

This Product is protected by one or more patents from the family comprising:US10155942, AU2013337280, CA2889862, People's Republic of China Patent: ZL201380069090.3, US10961529, DE602013026292.6, EP2914745, UK2914745, HK1089485, JP6454281 and any corresponding patents, divisionals, continuations, patent application and foreign filings sharing priority with the same family.

STATEMENT 448

This product is sold under license from Becton Dickinson and Company and is covered by one or more of the following US Patent Nos. 8,835,358; 9,290,808; 9,290,809; 9,315,857; 9,708,659; 9,816,137; 9,845,502; 10,047,394; 10,059,991; 10,202,646; 10,392,661; 10,619,203; and pending U.S. patent applications 16/551,638 and 16/846,133.

TRADEMARKS:

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