

# GeneChip™ 3' IVT PLUS Reagent Kit and GeneChip™ HT 3' IVT PLUS Reagent Kit

Catalog Numbers 902415, 902416, and 902417

Pub. No. 703206 Rev. 3

 **WARNING!** Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. Safety Data Sheets (SDSs) are available from [thermofisher.com/support](http://thermofisher.com/support).

## Product use

This product information sheet provides information for the Applied Biosystems™ GeneChip™ 3' IVT PLUS Reagent Kit and GeneChip™ HT 3' IVT PLUS Reagent Kit. The kit generates amplified and biotinylated complementary RNA (cRNA. cRNA is also known as amplified RNA or aRNA) from poly(A) RNA in the total RNA sample. The kit is optimized for use with GeneChip™ GeneChip™ 3' IVT Arrays.

The kit is offered in three configurations:

- 10-reaction kit for generating ten target preps using a manual assay protocol
- 30-reaction kit for generating 30 target preps using a manual assay protocol, or 24 target preps using an automated target prep assay on the Beckman Coulter™ Biomek™ FX<sup>P</sup>
- 96-reaction kit for generating 96 target preps using an automated target prep assay on the Beckman Coulter™ Biomek™ FX<sup>P</sup>

## Introduction

Both the manual and high throughput versions of the GeneChip™ 3' IVT PLUS Reagent Kit use a reverse transcription priming method that primes the poly(A) tail junction of RNA to provide gene expression profiles from mRNA. RNA amplification is based on linear amplification and uses T7 *in vitro* transcription (IVT) technology. Each kit contains reagents and a protocol for preparing hybridization-ready targets from 50 ng to 500 ng of total RNA. The GeneChip™ 3' IVT PLUS Reagent Kit is optimized to work with a wide range of samples including tissues, cells, and cell lines. The total RNA samples can be used directly without removal of ribosomal or RNA before target preparation with the GeneChip™ 3' IVT PLUS Reagent Kit.

## Shipping information

The four components of the GeneChip™ 3' IVT PLUS Reagent Kit are shipped at different temperatures.

- 3' IVT PLUS Amplification Kit Module 1 (–20°C component)
- 3' IVT PLUS Amplification Kit Module 2 (4°C component)

- GeneChip™ Eukaryotic Poly-A RNA Control Kit (–20°C component)
- GeneChip™ Hybridization Control Kit (–20°C component)

## Kit components

Module/component	Storage
<b>3' IVT PLUS Amplification Kit Module 1</b>	
3' First-Strand Enzyme	–20°C
3' First-Strand Buffer	–20°C
3' Second-Strand Enzyme	–20°C
3' Second-Strand Buffer	–20°C
3' IVT Enzyme	–20°C
3' IVT Buffer	–20°C
3' IVT Biotin Label	–20°C
Control RNA (1 mg/mL HeLa total RNA)	–20°C
Nuclease-Free Water	Any temp <sup>[1]</sup>
<b>3' IVT PLUS Amplification Kit Module 2</b>	
Purification Beads	4°C <sup>[2]</sup>
3' Fragmentation Buffer	Room temp
GeneChip™ Eukaryotic Poly-A RNA Control Kit	
Poly-A Control Stock	–20°C
Poly-A Control Dil Buffer	–20°C
GeneChip™ Hybridization Control Kit	
20X Hybridization Controls	–20°C
3 nM Control Oligo B2	–20°C

<sup>[1]</sup> Store the Nuclease-Free Water at –20°C, 4°C, or room temperature. Not included in Cat. No. 902417.

<sup>[2]</sup> Do not freeze.

## Functional testing

Every lot is rigorously tested for performance.

## Ordering information

Cat. No.	Product name	Description
902415	GeneChip™ 3' IVT PLUS Reagent Kit	10 reactions
902416	GeneChip™ 3' IVT PLUS Reagent Kit	30 reactions
902417	GeneChip™ HT 3' IVT PLUS Reagent Kit	96 reactions
Supporting products		
900720	GeneChip™ Hybridization, Wash, and Stain Kit	30 reactions
901531	GeneAtlas™ Hybridization, Wash, and Stain Kit for 3' IVT Array Strips	60 reactions
901530	GeneTitan™ Hybridization, Wash, and Stain Kit for 3' IVT Arrays	96 reactions
901583	GeneTitan™ Wash Buffers A and B Module	Wash Buffer A = 1,045 mL Wash Buffer B = 450 mL

## Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at [www.thermofisher.com/us/en/home/global/terms-and-conditions.html](http://www.thermofisher.com/us/en/home/global/terms-and-conditions.html). If you have any questions, please contact Life Technologies at [www.thermofisher.com/support](http://www.thermofisher.com/support).



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**Revision history:** Pub. No. 703206

Revision	Date	Description
3	02 August 2017	Update document to current template.
2	16 May 2014	Baseline for revision history.

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