


# GeneChip™ WT Terminal Labeling Kit and HT WT Terminal Labeling Kit

Catalog Numbers 900670 and 900671

Pub. No. 703215 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

The Applied Biosystems™ GeneChip™ WT Terminal Labeling Kit and the HT WT Terminal Labeling Kit generate fragmented and biotinylated DNA from single-stranded cDNA for use with Applied Biosystems™ Whole Transcript (WT) Expression Arrays.

The GeneChip™ WT Terminal Labeling Kit is offered for individual purchase in two configurations:

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

**Note:** The 96-reaction HT WT Terminal Labeling Kit is not available for individual purchase, but is available as a component of the HT WT Terminal Labeling and Controls Kit. See ordering information for details.

## Introduction

Both the manual and high throughput versions of the WT Terminal Labeling kit use a strategy for reproducible DNA fragmentation with a combination of uracil DNA glycosylase (UDG) and apurinic/apyrimidinic endonuclease 1 (APE 1). The typical input material is random-primed, single-stranded DNA, generated from the WT PLUS Amplification Kit that incorporates deoxyuridine at predefined ratios relative to thymidine. Following fragmentation, the resulting fragmented DNA can then be labeled using terminal deoxynucleotidyl transferase (TdT) in the presence of a proprietary biotinylated compound, GeneChip™ DNA Labeling Reagent. Both components are provided in the GeneChip™ WT Terminal Labeling Kit and the HT WT Terminal Labeling Kit. The final labeled DNA target is ready to be added to the cocktail for hybridizing to GeneChip™ WT expression arrays.

## Functional testing

Each lot is functionally tested in the GeneChip™ expression assay following the recommended protocol.

## Kit components

Component	Storage
10X cDNA Fragmentation Buffer	-20°C
UDG, 10U/μL	-20°C
APE 1, 1000U/μL	-20°C
TdT, 30U/μL	-20°C
5X TdT Buffer	-20°C
DNA Labeling Reagent, 5mM	-20°C
RNase-free Water	Any temp <sup>[1]</sup>

<sup>[1]</sup> Store the Nuclease-Free Water at -20°C, 4°C, or room temperature.

## Storage

The kit must be kept at -20°C in a non-frost-free freezer. Performance of the kit has been shown to be unaffected for up to eight freeze-thaw cycles.

## Ordering information

Cat. No.	Product name	Description
900670	GeneChip™ WT Terminal Labeling Kit	10 reactions
900671	GeneChip™ WT Terminal Labeling Kit	30 reactions

Cat. No.	Product name	Description
<b>Supporting products</b>		
900720	GeneChip™ Hybridization, Wash, and Stain Kit	30 reactions
901667	GeneAtlas™ Hybridization, Wash, and Stain Kit for WT Array Strips	60 reactions
901622	GeneTitan™ Hybridization, Wash, and Stain Kit for WT Array Plates	96 reactions
901525	GeneChip™ WT Terminal Labeling and Controls Kit <ul style="list-style-type: none"> <li>GeneChip™ WT Terminal Labeling Kit (Cat. No. 900670)</li> <li>GeneChip™ Hybridization Control Kit (Cat. No. 900454)</li> <li>GeneChip™ Eukaryotic Poly-A RNA Control Kit (Cat. No. 900433)</li> </ul>	10 reactions
901524	GeneChip™ WT Terminal Labeling and Controls Kit <ul style="list-style-type: none"> <li>GeneChip™ WT Terminal Labeling Kit (Cat. No. 900671)</li> <li>GeneChip™ Hybridization Control Kit (Cat. No. 900454)</li> <li>GeneChip™ Eukaryotic Poly-A RNA Control Kit (Cat. No. 900433)</li> </ul>	30 reactions
901647	HT WT Terminal Labeling and Controls Kit <ul style="list-style-type: none"> <li>GeneChip™ WT Terminal Labeling Kit</li> <li>GeneChip™ Hybridization Control Kit (Cat. No. 900454)</li> <li>GeneChip™ Eukaryotic Poly-A RNA Control Kit (Cat. No. 900433)</li> </ul>	1 x 24 reactions
901648	HT WT Terminal Labeling and Controls Kit <ul style="list-style-type: none"> <li>GeneChip™ WT Terminal Labeling Kit</li> <li>GeneChip™ Hybridization Control Kit (Cat. No. 900457)</li> <li>GeneChip™ Eukaryotic Poly-A RNA Control Kit (Cat. No. 900433)</li> </ul>	1 x 96 reactions

## Limited product warranty

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**Revision history:** Pub. No. 703215

Revision	Date	Description
3	15 August 2017	Updated document to current template.
2	March 2014	Baseline for revision history.

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