

# TaqMan® Array Plates

Ready-to-use plates with preloaded TaqMan® Assays

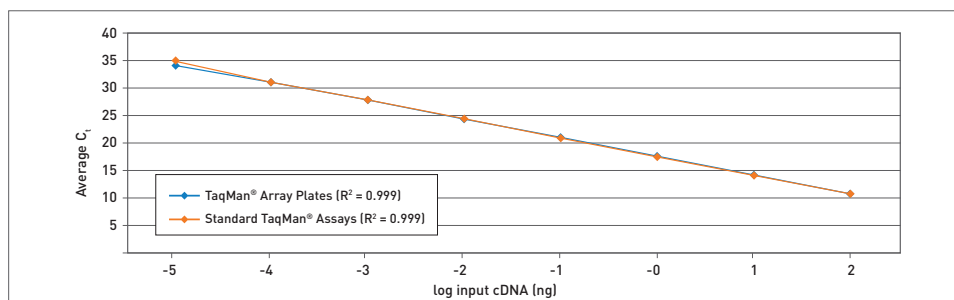


- **Convenient setup**—dried TaqMan® Assays in a 96- or 384-well plate; just add master mix and your cDNA sample
- **Flexible format**—choose from preconfigured to customizable TaqMan® Array Plates in fast or standard formats
- **Easy data analysis**—Symphoni<sub>SUITE</sub>™ Analysis Software helps provide rapid cloud-based data interpretation

## Introduction

Manual transfer of reagents into plates during routine experimental setups can be time-consuming and tedious. Daily preparation of such plates can negatively impact overall productivity. To ease the stress and minimize the error rate, TaqMan® Array Plates are designed to reduce redundant pipetting steps and minimize loading errors, making them an ideal solution for fast and easy experimental setup.

TaqMan® Array Plates contain high-quality TaqMan® Gene Expression Assays (TaqMan® probe and PCR primer sets) in a convenient, dried-down, 96- or 384-well plate format. Extensive tests have found no difference in performance between TaqMan® Assays supplied in solution in single tubes and assays supplied dried in a TaqMan® Array Plate (Figure 1).



**Figure 1. Linear dynamic range of TaqMan® Array Plates (standard) vs. TaqMan® Assays.** TaqMan® Array Plates have the same performance as standard TaqMan® Assays (wet) on a 96-well plate. The linear dynamic range is maintained, even down to low cDNA inputs, showing the assays are unaffected by the process of drying down the TaqMan® Array Plate. Each plate contained one assay (18S Hs99999901\_s1) and eight replicates for each cDNA input.

TaqMan® Array Plates include enough TaqMan® Assay in each well for a 20 µL reaction (96-well standard plate), 10 µL reaction (96-well fast plate), or 5–10 µL reaction (384-well plate). These preloaded plates can help accelerate research in a variety of application areas, including microarray validation and pathway studies (Table 1).

Table 1. Examples of published research using TaqMan® Array Plates for a variety of applications.

Research focus	Title	Publication
Cancer	Benzene-poly-carboxylic acid complex, a novel anti-cancer agent induces apoptosis in human breast cancer cells	<i>PLoS One</i> 9:e85156 (2014)
Autophagy	L450W and Q455K Col8a2 knock-in mouse models of Fuchs endothelial corneal dystrophy show distinct phenotypes and evidence for altered autophagy	<i>Invest Ophthalmol Vis Sci</i> 54:1887 (2013)
Infectious diseases	Distinct and overlapping genomic profiles and antiviral effects of Interferon-λ and -α on HCV-infected and non-infected hepatoma cells	<i>J Viral Hepat</i> 19:843 (2012)
Apoptosis	Ribonuclease binase apoptotic signature in leukemic Kasumi-1 cells	<i>Biochimie</i> 95:1344 (2013)

## Versatile formats

TaqMan® Array Plates are available in various formats to meet your laboratory’s needs (Table 2).

- **Preconfigured (fixed-content) TaqMan® Array Plates**—fixed content of the most sought-after predefined gene panels, categorized by specific disease, pathway, or biological process (Table 3)
- **Flexible-content TaqMan® Array Plates**—select preconfigured pathway panels and modify with predesigned TaqMan® assays to suit your needs
- **Custom TaqMan® Array Plates**—can be readily designed from more than 1.3 million predesigned TaqMan® Gene Expression Assays available for 24 species, including some pathogens. Ordering is easy with the online Custom TaqMan® Array Plate configuration tool, which helps you find and select genes and assays. Custom TaqMan® Array Plates are available in 9 different formats (Table 4).

- **Custom formatting service**—design your own TaqMan® Array Plate configured to your specifications (e.g., TaqMan® SNP Genotyping Assays, TaqMan® Copy Number Assays, or combined mRNA/miRNA assays). Custom plating services are available for 96-well standard, 96-well fast, and 384-well plates.

## Easy workflow, superior sensitivity

Save a significant amount of time setting up your experiments—just add master mix and cDNA sample, and begin cycling. The standard plate format provides real-time PCR results in about 1.5 hours, whereas the fast plate format typically delivers results in only 30 to 45 minutes.

Furthermore, you can use the optional TaqMan® PreAmp Master Mix and Custom TaqMan® PreAmp Pools of assays to generate a comprehensive expression profile with far less sample input—as little as 1 ng

Table 2. TaqMan® Array Plate formats and application compatibility.

	Preconfigured TaqMan® Array Plates	Flexible Content TaqMan® Array Plates	Custom TaqMan® Array Plates	Custom Formatting Service
<b>Definition</b>	Fixed, predefined gene panels	Modifiable predefined gene panels	Configurable predesigned assays	Client-requested designs
<b>Web page</b>	<a href="http://lifetechnologies.com/taqmanarrays">lifetechnologies.com/taqmanarrays</a>	<a href="http://lifetechnologies.com/flexiblepanels">lifetechnologies.com/flexiblepanels</a>	<a href="http://lifetechnologies.com/arrayplates">lifetechnologies.com/arrayplates</a>	<a href="http://lifetechnologies.com/customformattingservice">lifetechnologies.com/customformattingservice</a>
<b>Application supported</b>				
<b>Gene expression</b>	✓ (96-well)	✓ (96-well)	✓ (96-well)	✓ (96-, 384-well)
<b>MicroRNA</b>				✓ (96-, 384-well)
<b>Genotyping</b>				✓ (96-, 384-well)



Table 4. Custom TaqMan® Array Plate format options for 96-well plates.

Format	No. of assays + controls	No. of samples	Minimum order	Cat. No. (standard)	Cat. No. (fast)
TaqMan® Array Plate 8	7 + 1	12	6	4413266	4413263
TaqMan® Array Plate 16	15 + 1	6	6	4413264	4413261
TaqMan® Array Plate 16 Plus	12 + 4	6	6	4413265	4413262
TaqMan® Array Plate 32	31 + 1	3	6	4391528	4413259
TaqMan® Array Plate 32 Plus	28 + 4	3	6	4391529	4413260
TaqMan® Array Plate 48	47 + 1	2	6	4391526	4413257
TaqMan® Array Plate 48 Plus	44 + 4	2	6	4391527	4413258
TaqMan® Array Plate 96	95 + 1	1	6	4391524	4413255
TaqMan® Array Plate 96 Plus	92 + 4	1	6	4391525	4413256

## Ordering information—related products

### Preamplification reagents

Product	Quantity	Cat. No.
TaqMan® PreAmp Master Mix (2X)	40 reactions	4391128
TaqMan® PreAmp Master Mix (2X)	200 reactions	4488593
Custom TaqMan® PreAmp Pools	250 reactions	4441856

For compatible TaqMan® Master Mixes, visit [lifetechnologies.com/taqmanmastermixes](http://lifetechnologies.com/taqmanmastermixes).  
For 384-well plate options, visit [lifetechnologies.com/customformattingsservice](http://lifetechnologies.com/customformattingsservice).

Find out more at [lifetechnologies.com/qpcr](http://lifetechnologies.com/qpcr)



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