

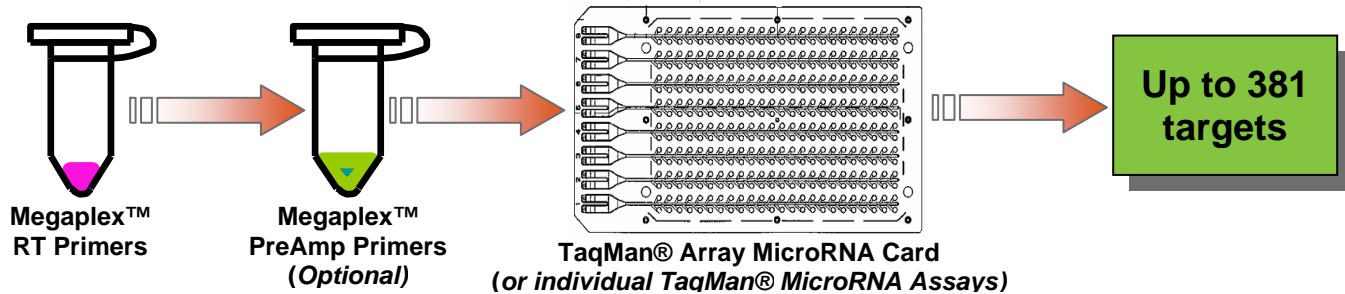
Megaplex™ Primer Pools

- Megaplex™ RT Primers
- Megaplex™ PreAmp Primers

Product P/N 4399966, 4399968, 4399970, 4399972, 4399233, 4399201, 4399203, 4399237, 4444281, 4444303, 4444292, 4444308
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Description

Megaplex™ RT Primers greatly streamline the workflow for quantitating up to 381 microRNAs in parallel by enabling reverse transcription of cDNA for all microRNAs in a single reaction and are available for human and rodent (mouse and rat) species. A companion pool of Megaplex™ PreAmp Primers enables an optional preamplification step to be added to the workflow in situations where sample is limiting, or sensitivity is of the utmost importance. For comprehensive coverage, two pools each (pool A and pool B) of Megaplex RT Primers and Megaplex PreAmp Primers are available for human and rodent species respectively. The Megaplex solution can be run either with individual TaqMan® MicroRNA Assays or, for the ideal profiling workflow, with matched TaqMan® Array MicroRNA Cards.



Megaplex Workflow using Megaplex Primer Pools and TaqMan Array MicroRNA Card

Kit Components

Megaplex RT Primers			
Reagent	P/N	Contents	# Samples
• Human Pool A v2.1	4399966	Two tubes: - RT primers - MgCl ₂	50
• Human Pool B v2.0	4399968		50
• Human Pool B v3.0	4444281		50
• Rodent Pool A v2.0	4399970	Two tubes: - RT primers - MgCl ₂	50
• Rodent Pool B v2.0	4399972		50
• Rodent Pool B v3.0	4444292		50

Megaplex Preamp Primers			
Reagent	P/N	Contents	# Samples
• Human Pool A v2.1	4399233	One tube: - PreAmp primers	50
• Human Pool B v2.0	4399201		50
• Human Pool B v3.0	4444303		50
• Rodent Pool A v2.0	4399203	One tube: - PreAmp primers	50
• Rodent Pool B v2.0	4399237		50
• Rodent Pool B v3.0	4444308		50

Ships at ambient. Store the Megaplex RT and PreAmp primer pools at -15 to -25 °C.

Data Normalization

Each TaqMan Array Card of the two-card set (either human or rodent) contains identical candidate endogenous control assays providing the user with a variety of options for normalization.

Endogenous Control	Species	Comments
Mammalian U6	Human, mouse & rat	<ul style="list-style-type: none"> Repeated 4x on card enabling monitoring of assay reproducibility
RNU48	Human	<ul style="list-style-type: none"> Small nucleolar RNA
RNU44	Human	<ul style="list-style-type: none"> Small nucleolar RNA
snoRNA135	Mouse	<ul style="list-style-type: none"> Small nucleolar RNA
snoRNA202	Mouse	<ul style="list-style-type: none"> Small nucleolar RNA
U87	Rat	<ul style="list-style-type: none"> Small nucleolar RNA
Y1	Rat	<ul style="list-style-type: none"> Small non-coding RNA
ath-miR159a	<i>Arabidopsis</i>	<ul style="list-style-type: none"> Not detectable in mammalian species For use as a negative or processing control

For more information on data normalization, please refer to Application Note “Endogenous Controls for Real-Time Quantitation of miRNA Using TaqMan® MicroRNA Assays” (Publication 127AP11-01).

Megaplex™ Assay Performance

Megaplex™ RT and PreAmp Primers are highly multiplexed pools designed to significantly streamline the workflow when profiling many miRNA targets in a single experiment. When combined in a large multiplex pool, a small subset of assays exhibit lower no-template-control (NTC C_T values < 35) values than when run individually. This is not an assay design issue. In the interest of providing the broadest coverage possible, customers have requested that we include these assays on the profiling array, but with the expectation that they are to be considered semi-quantitative. As a result, fold change measurements using these assays may be less than the true value. To aid data interpretation, the identity of these assays is provided in the **Megaplex Assay Performance File**. If accurate fold change measurements for these assays is required, it is recommended that changes detected using the Megaplex assay workflow be validated using the corresponding individual TaqMan® MicroRNA Assay.

The **Megaplex Assay Performance File** is provided on the CD accompanying the TaqMan® Array MicroRNA Cards.

File	PN
MEGAPLEX ASSAY PERFORMANCE FILE_HUMAN A v2.1	4403210
MEGAPLEX ASSAY PERFORMANCE FILE_HUMAN B v2.0	4403211
MEGAPLEX ASSAY PERFORMANCE FILE_HUMAN B v3.0	4428133
MEGAPLEX ASSAY PERFORMANCE FILE_RODENT A v2.0	4403212
MEGAPLEX ASSAY PERFORMANCE FILE_RODENT B v2.0	4403213
MEGAPLEX ASSAY PERFORMANCE FILE_RODENT B v3.0	4455463

Additional Supporting Documentation

Additional supporting documentation is included on the CD accompanying the TaqMan Array MicroRNA Cards.

Document	PN
Megaplex Pools Protocol	4399721
Megaplex Pools Quick Reference Card	4399813

Alternatively, the documents are available for download from the “Product and Technical Literature” section of the Applied Biosystems homepage (<http://www3.appliedbiosystems.com/sup/gl/search.htm>).

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