

Materials List for:

# Probe-based Real-time PCR Approaches for Quantitative Measurement of microRNAs

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URL: <https://www.jove.com/video/52586>

DOI: [doi:10.3791/52586](https://doi.org/10.3791/52586)

## Materials

Name	Company	Catalog Number	Comments
96 well-platform			
For Reverse transcription			
TaqMan MicroRNA Assays INV SM	Applied Biosystems	4427975	<a href="https://www.lifetechnologies.com/au/en/home/life-science/pcr/real-time-pcr/real-time-pcr-assays/mirna-ncrna-taqman-assays/single-tube-mirna-taqman-assays.html?ICID=search-4427975">https://www.lifetechnologies.com/au/en/home/life-science/pcr/real-time-pcr/real-time-pcr-assays/mirna-ncrna-taqman-assays/single-tube-mirna-taqman-assays.html?ICID=search-4427975</a> The assays comes as a pack of RT primers and PCR primer.
TaqMan MicroRNA Reverse Transcription Kit	Applied Biosystems	4366597 or 4366596	<a href="https://www.lifetechnologies.com/order/catalog/product/4366597?ICID=search-4366597">https://www.lifetechnologies.com/order/catalog/product/4366597?ICID=search-4366597</a> or <a href="http://www.lifetechnologies.com/order/catalog/product/4366596?ICID=search-4366596">http://www.lifetechnologies.com/order/catalog/product/4366596?ICID=search-4366596</a> The TaqMan MicroRNA Reverse Transcription Kit is the same kit used for reverse transcription in all the three TaqMan platform- 96-well platform, TLDA and OpenArray.
For qPCR run on a 96-well platform			
2x TaqMan Fast Universal PCR Master Mix, no AmpErase UNG	Applied Biosystems	4367846	<a href="https://www.lifetechnologies.com/order/catalog/product/4367846?ICID=search-4367846">https://www.lifetechnologies.com/order/catalog/product/4367846?ICID=search-4367846</a> The 2X TaqMan Fast Universal PCR Master Mix is used for qPCR on the two TaqMan platforms-96-well platform and TLDA.
MicroAmp Optical Adhesive Film	Applied Biosystems	4311971	<a href="https://www.lifetechnologies.com/order/catalog/product/4311971?ICID=search-product">https://www.lifetechnologies.com/order/catalog/product/4311971?ICID=search-product</a>
MicroAmp Fast Optical 96-Well Reaction Plate, 0.1 ml	Applied Biosystems	4346907	<a href="https://www.lifetechnologies.com/order/catalog/product/4346907?ICID=search-product">https://www.lifetechnologies.com/order/catalog/product/4346907?ICID=search-product</a>
Microfluidics platform (TLDA)			
For Reverse transcription			
Refer to 96-well platform TaqMan MicroRNA Reverse Transcription Kit kit (4366597 or 4366596) (as shown above).			

Megaplex RT Primers, Human Pool A v2.1	Applied Biosystems	4399966	<a href="https://www.lifetechnologies.com/order/catalog/product/4399966?ICID=search-4399966">https://www.lifetechnologies.com/order/catalog/product/4399966?ICID=search-4399966</a> The Megaplex RT Primers, Human Pool A v2.1 is used for RT on the two TaqMan platforms- TLDA and OpenArray.
Megaplex RT Primers, Human Pool B v3.0	Applied Biosystems	4444281	<a href="https://www.lifetechnologies.com/order/catalog/product/4444281?ICID=search-4444281">https://www.lifetechnologies.com/order/catalog/product/4444281?ICID=search-4444281</a> The Megaplex RT Primers, Human Pool B v3.0 is used for RT on the two TaqMan platforms- TLDA and OpenArray.
OR			OR
Megaplex Primer Pools, Human Pools Set v3.0	Applied Biosystems	4444750	<a href="http://www.lifetechnologies.com/order/catalog/product/4444750?ICID=search-4444750">http://www.lifetechnologies.com/order/catalog/product/4444750?ICID=search-4444750</a> The Megaplex Primer Pools, Human Pools Set v3.0 is used for RT on the two TaqMan platforms- TLDA and OpenArray.
For Pre-amplification			
TaqMan PreAmp Master Mix	Applied Biosystems	4391128 or 4488593	<a href="https://www.lifetechnologies.com/order/catalog/product/4391128?ICID=search-4391128">https://www.lifetechnologies.com/order/catalog/product/4391128?ICID=search-4391128</a> or <a href="http://www.lifetechnologies.com/order/catalog/product/4488593">http://www.lifetechnologies.com/order/catalog/product/4488593</a> The TaqMan PreAmp Master Mix is used for pre-amplification of qPCR on the two TaqMan platforms- TLDA and OpenArray.
Megaplex PreAmp Primers, Human Pool B v3.0	Applied Biosystems	4444303	<a href="https://www.lifetechnologies.com/order/catalog/product/4444303?ICID=search-4444303">https://www.lifetechnologies.com/order/catalog/product/4444303?ICID=search-4444303</a> The Megaplex PreAmp Primers, Human Pool B v3.0 is used for pre-amplification of qPCR on the two TaqMan platforms- TLDA and OpenArray.
Megaplex PreAmp Primers, Human Pool A v2.1	Applied Biosystems	4399233	<a href="https://www.lifetechnologies.com/order/catalog/product/4399233?ICID=search-4399233">https://www.lifetechnologies.com/order/catalog/product/4399233?ICID=search-4399233</a> The Megaplex PreAmp Primers, Human Pool A v2.1 is used for pre-amplification of qPCR on the two TaqMan platforms- TLDA and OpenArray.
1x TE Buffer (100 ml)	Invitrogen	12090-015	<a href="https://www.lifetechnologies.com/order/catalog/product/12090015?ICID=search-product">https://www.lifetechnologies.com/order/catalog/product/12090015?ICID=search-product</a> The 1x TE Buffer is used for pre-amplification of qPCR on the two TaqMan platforms- TLDA and OpenArray.
To load and run the 384 well microfluidics (TLDA) card			
TaqMan Array Human MicroRNA A +B Cards Set v3.0	Applied Biosystems	4444913	<a href="https://www.lifetechnologies.com/order/catalog/product/4444913">https://www.lifetechnologies.com/order/catalog/product/4444913</a>
Nanofluidics platform (OpenArray)			
For Reverse transcription			

Refer to 96-well platform TaqMan MicroRNA Reverse Transcription Kit kit (4366597 or 4366596) (as shown above).			
For Pre-amplification			
Refer to TLDA pre-amplification reagents (as shown above)			
To load and run the slides			
TaqMan OpenArray Human MicroRNA Panel, QuantStudio 12K Flex (1 panel)	Applied Biosystems	4470187	<a href="https://www.lifetechnologies.com/order/catalog/product/4470187?ICID=search-4470187">https://www.lifetechnologies.com/order/catalog/product/4470187?ICID=search-4470187</a>
QuantStudio 12K Flex OpenArray Accessories Kit	Applied Biosystems	4469576	<a href="https://www.lifetechnologies.com/order/catalog/product/4469576?ICID=search-4469576">https://www.lifetechnologies.com/order/catalog/product/4469576?ICID=search-4469576</a>
OpenArray 384-well Sample Plates	Applied Biosystems	4406947	<a href="https://www.lifetechnologies.com/order/catalog/product/4406947?ICID=search-4406947">https://www.lifetechnologies.com/order/catalog/product/4406947?ICID=search-4406947</a>
TaqMan OpenArray Real-Time PCR Master Mix	Applied Biosystems	4462159	<a href="https://www.lifetechnologies.com/order/catalog/product/4462159?ICID=search-4462159">https://www.lifetechnologies.com/order/catalog/product/4462159?ICID=search-4462159</a>
OpenArray AccuFill System Tips	Applied Biosystems	4457246	<a href="https://www.lifetechnologies.com/order/catalog/product/4457246?ICID=search-4457246">https://www.lifetechnologies.com/order/catalog/product/4457246?ICID=search-4457246</a>
Others			
Nuclease-Free Water	Qiagen	129117	<a href="http://www.qiagen.com/products/catalog/lab-essentials-and-accessories/nuclease-free-water">http://www.qiagen.com/products/catalog/lab-essentials-and-accessories/nuclease-free-water</a>