

ReactionReady™ HotStart "Sweet" PCR Master Mix

<u>Catalog Number</u>	<u>Description</u>
PA-007	2X Solution, 200 25- μ l reaction scale (2.5 ml)

Description

ReactionReady™ HotStart "Sweet" PCR master mix contains all of the reagents and buffers required for conventional polymerase chain reactions: PCR buffer, a high-fidelity HotStart *Taq* DNA polymerase, nucleotides, and an inert gel-loading dye for end-point agarose gel electrophoresis. The HotStart *Taq* polymerase provides cleaner, more specific amplification products especially when used with RT² PCR Primer Sets from SuperArray. The master mix is simply added directly into PCR tubes containing template and primers. PCR is initiated with a 15 minute high-temperature step to melt all nucleic acid and to activate the polymerase. After the completion of PCR, a portion of the reaction can be loaded directly onto an agarose gel for characterization. There is no need to add gel loading buffer or dye. The ReactionReady™ HotStart "Sweet" PCR master mix may be used for any application involving conventional PCR and analysis by agarose gel electrophoresis.

Contents

Please check the kit components immediately after you receive this package. SuperArray is not responsible for any missing items not reported within two (2) business days upon receipt.

PA-007: Two (2) tubes each containing 1.25 ml of the 2X solution and enough for 100 standard 25- μ l reactions

Storage Conditions

The kit is shipped on dry ice or cold packs. For long-term storage, keep at -20 °C. If entire volume is not be used all at once, divide into aliquots and store at -20 °C. Avoid repeated freezing and thawing.

Shelf Life

All reagents are stable for 6 months after receipt if stored at the recommended temperature.

Product Specification Sheet

Recommendations for Use

1. Ensure that you do not contaminate the 2X conventional PCR cocktail by dividing into aliquots containing the amount of cocktail necessary for the number of reactions you are preparing each day. The rest of the cocktail should be kept in storage away from any sources of template DNA.
2. When using ReactionReady™ HotStart "Sweet" PCR Master Mix with RT² PCR Primer Sets, refer to the RT² PCR Primer Sets User Manual.
3. For each 25- μ l PCR, mix the following components in a PCR tube:
 - 12.5 μ l ReactionReady™ HotStart "Sweet" PCR master mix
 - 9.5 μ l ddH₂O
 - 1.0 μ l of either either undiluted or dilute template cDNA
 - 1.0 μ l RT² PCR Primer Set
 - 25.0 μ l final volume

NOTE: *The Internal Normalizer is optional but highly recommended to control for sample-to-sample systematic variation (see Catalog Numbers below).*

4. Place tubes in thermal cycler. Enter and run the following program:
95 °C, 15 min; 30 to 40 cycles of (95 °C, 15 sec; 55 °C, 30 sec; and 72 °C, 30 sec)

NOTE: *The 15 min step at 95 °C is required to activate the HotStart Taq DNA polymerase.*

NOTE: *The PCR cycle number should be optimized for each experiment. Try using 30 cycles at first.*

5. Load 10 μ l of each reaction onto separate wells of a 2% agarose gel containing ethidium bromide (0.5 μ g/ml) in 1X TAE. Electrophorese in 1X TAE at 90V for 40 minutes or before the orange tracking dye (at < 10 base pairs) runs off the gel. Capture an image of the gel with a gel documentation system or UV Trans Illuminator with high-speed photographic equipment.

Related Products:

RT² PCR Primer Sets (Search for the qPCR set for your gene at: www.superarray.com/QRTsearch.php)

Internal Normalizers for End-Point PCR (See www.superarray.com/normalizer.php)

ReactionReady™ Human GAPD Internal Normalizer	PA-020-200
ReactionReady™ Mouse GAPD Internal Normalizer	PA-021-200
ReactionReady™ Rat GAPD Internal Normalizer	PA-022-200