

Hifair™ V one-step RT-gDNA digestion SuperMix for qPCR

Product Information

Product Name	Cat #	Size
Hifair™ V one-step RT-gDNA digestion SuperMix for qPCR	11142ES60	100 T

Product Description

Hifair™ V one-step RT-GDNA Digestion SuperMix for qPCR Hifair™ III 1st Strand cDNA Synthesis SuperMix for qPCR (gDNA Digester Plus, an upgraded version of digester Plus, can perform both reverse transcription and genome removal in the same tube, reducing the risk of sample contamination and RNA degradation caused by the complex sample addition process. Hifair™ V Reverse Transcriptase, RNase Inhibitor, Oligo(dT)₁₈ Primer, 5×Hifair™ One Step RT SuperMix Random Primer, dNTPs, Buffer), gDNA Remover Mix, RNA template and water are added during the reaction to efficiently synthesize the first-strand cDNA, while removing genomic DNA contamination. In addition, the 5×Hifair™ One Step No-RT Control SuperMix is available for configuring a reverse transcriptase free Control to determine whether a qPCR template is from cDNA.

The Hifair™ V Reverse Transcriptase in this product can withstand reaction temperatures up to 60°C and is suitable for Reverse transcription of RNA templates with complex secondary structures. At the same time, the enzyme enhances the affinity with templates, which is ideal for reverse transcription of a small number of templates and low-copy genes. Reverse transcription-compatible probe and dye qPCR, Hieff Unicon™ Universal TaqMan multiplex qPCR master Mix (Cat#11211) and Hieff Unicon™ Universal Blue were recommended by probe and dye qPCR Mix respectively qPCR SYBR Green Master Mix (Cat#11184) was used for high performance gene expression analysis.

Package Information

Component Number	Components	11141ES60 (100 T)
11142-A	5×Hifair™ One Step RT SuperMix	400 μL
11142-B	gDNA Remover Mix	100 μL
11142-C	5×Hifair™ One Step No-RT Control SuperMix	40 μL
11142-D	RNase free H ₂ O	2×1 mL

Application

It is suitable for two-step RT-qPCR.

Shipping and Storage

The product is shipped with ice packs and can be stored at -20°C for 12 months. Please avoid repeated freeze-thaw.

Cautions

1. All operations should be carried out on ice and RNase contamination should be avoided.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. This product is for research use ONLY!

First strand cDNA synthesis steps

1. Residual genomic DNA removal

Reaction system configuration: melt 11142-A/B/C components on ice, fully shake the reagent components and mix, and configure

the following system in the RNase-free centrifuge tube:

Components	Volume
RNase-free H ₂ O	up to 20 μ L
5 \times Hifair TM One Step RT SuperMix	4 μ L
gDNA Remover Mix	1 μ L
Total RNA	10 ng-1 μ g

No-rt Control reaction (optional)

5 \times HifairTM One Step no-RT Control SuperMix, used to configure a reverse transcriptase free Control to determine whether the qPCR template came from cDNA.

Components	Volume
RNase-free H ₂ O	Up to 20 μ L
5 \times Hifair TM One Step RT SuperMix	4 μ L
gDNA Remover Mix	1 μ L
Total RNA	10 ng-1 μ g

2. Mix gently and reverse transcription is performed as follows

Temperature	Time
30°C	5 min
55°C	15 min
85°C	5 min

Note:

1. This Reverse transcription temperature: 55°C is recommended. For high GC content templates or complex templates, the reverse transcription temperature can be raised to 60°C.
2. The product can be directly used in qPCR reactions, or stored at -20°C for a short-term storage. It is recommended to aliquot the products and store them at -80°C for a long-term storage. Avoid repeated freezing and thawing.