

ProbeMaster® Lyo ROX, 5×

<http://hk.lumiprobe.com/p/probemaster-mix-rox-lyo>

ProbeMaster® Lyo ROX is a lyophilized reaction mixture containing all the necessary components for quantitative PCR using intercalating dyes or hydrolyzable probes. Its composition is optimized to achieve ideal results with a low threshold cycle and a high signal-to-background ratio. The ready-to-use reaction mixtures reduce the risk of sample contamination. To reconstitute the mixture into a liquid form, add the specified amount of water.

The ProbeMaster® Lyo ROX reaction mixture allows you to solve a large number of tasks with minimal time costs. Due to the presence of the [ROX](#) reference dye, the mixture is suitable for accurately determining the DNA template content in the sample. It can be used for quantitative analysis, gene expression determination, genotyping, SNP detection, and other applications.

Reaction mixture composition

- HS Taq DNA polymerase;
- Deoxynucleoside triphosphate mixture;
- PCR buffer (contains Mg²⁺);
- ROX reference dye;
- Cryoprotectants

Key characteristics

- One tube of lyophilized mixture, after dilution in 450 µL of water, is sufficient for 100 reactions of 25 µL each.
- The mixture is completely ready for use. To set up the reaction, you only need to add the intercalating dye or probe for detection of the amplification product, the DNA sample, primers, and water.
- The mixture is suitable for PCR of fragments up to 3000 bp, with no more than 70% GC content, and does not require high-precision amplification. Genomic, viral, plasmid DNA, etc., can be used as a template.
- The reaction mixture contains Taq polymerase with "Hot-Start" technology. The HS Taq DNA polymerase used is a complex of monoclonal antibodies with the enzyme. Heating the sample during the first PCR cycle inactivates antibodies in the complex and activates the enzyme. The "Hot-Start" technology prevents nonspecific amplification and primer dimers.
- The HS Taq DNA polymerase included in the mixture possesses 5'-3' polymerase, 5'-3' exonuclease, and adenylyltransferase activity.
- For fluorescence detection, use a DNA probe labeled with a fluorophore and a quencher (hydrolyzable probes, "molecular beacons", "scorpion" type primers), or two probes labeled with fluorophores forming a FRET pair.
- The [ROX](#) reference dye included in the mixture allows normalization of probe and intercalating dye fluorescence intensities, such as [dsGreen](#). The ROX concentration has explicitly been optimized for use with most real-time PCR machines on the market.
- Does not contain UDG and dUTP.
- The mixture is suitable for applications where uracil-containing amplification products cannot be used.

Equipment compatibility:

The ProbeMaster® Lyo ROX reaction mixture is compatible with most real-time PCR machines, including those manufactured

by Applied Biosystems (7300, 7500, 7500 Fast, 7900HT, QuantStudio 12k Flex, QuantStudio 3, QuantStudio 5, QuantStudio 6 Flex, QuantStudio 7, StepOne, StepOnePlus, ViiA 7 System), Bio-Rad (CFX384, CFX 96, iQ5), Roche (LC 480), Stratagene (MX3000P, MX3005P, MX4000), etc.

PCR reaction mixture selection table

| Name | Reaction mixtures for quantitative PCR (RT-PCR) | | | | Application |
|--|---|--------|-----|-----------|---|
| | dsGreen | Eva488 | ROX | UDG, dUTP | |
| ProbeMaster® Lyo UDG Cat.# •0514 | — | — | — | ✓ | qPCR with DNA probes or intercalating dye |
| ProbeMaster® Lyo ROX Cat.# •0114 | — | — | ✓ | — | |
| ProbeMaster® Lyo Eva488 Cat.# •0614 | — | ✓ | — | — | |
| ProbeMaster® Lyo Eva488 ROXCat.# •0714 | — | ✓ | ✓ | — | |
| ProbeMaster® Lyo dsGreen Cat.# •0814 | ✓ | — | — | — | |
| Reaction mixture for standard PCR | | | | | |
| ProbeMaster® Lyo GEL Cat.# •0024 | — | — | — | — | PCR followed by gel electrophoresis analysis, contains dye for application to gel |
| ProbeMaster® Lyo GEL UDGCat.# •0524 | — | — | — | ✓ | |
| Universal reaction mixture | | | | | |
| ProbeMaster® Lyo UNI Cat.# •0534 | — | — | — | — | qPCR with DNA probes/intercalating dye or standard PCR followed by gel electrophoresis analysis |

外观: 粉紅色平板電腦

溶解度: 水

质量控制: 功能測試

储存条件: 儲存: 4°C 下 12 個月 (自交貨之日起)。

運輸: 在 25°C 溫度下最多 21 天。

重新配製為液體形式後, 可在 4°C 下儲存最多 30 天, 或在有效期內冷凍並儲存在 -20°C 下。重構的混合物最多可經歷五次凍融循環。

法律声明: 本產品僅供研究目的提供和銷售。本產品並未經過食品、藥品、醫療器械、化妝品等領域的安全性和效力測試, 且未經明示或暗示授權用於其他任何用途, 包括但不限於體外診斷、人類或動物用途, 以及商業用途。

ProbeMaster® 是 Lumiprobe 的註冊商標。