

## ProbeMaster® Lyo UNI, 5×

<http://cn.lumiprobe.com/p/pcr-qpcr-master-mix-lyo>

ProbeMaster® Lyo UNI is a ready-to-use lyophilized reaction mixture containing all the necessary components for polymerase chain reaction (PCR). To reconstitute the mixture into liquid form, add the specified amount of water.

The ProbeMaster® Lyo UNI mixture is suitable for both real-time PCR and DNA amplification followed by electrophoresis detection. Because UDG/dUTP is not included in the composition, this mixture can be used for routine cloning and other applications that require further use of the PCR product after amplification.

## Reaction mixture composition

- HS Taq DNA polymerase;
- Deoxynucleoside triphosphate mixture;
- PCR buffer (contains Mg<sup>2+</sup>);
- 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 ready for use, reducing the risk of sample contamination and significantly reducing setup time for the reaction. For standard PCR (with subsequent analysis by gel electrophoresis), only the DNA sample, primers, and water need to be added to the mixture. For quantitative PCR, an intercalating dye or probe to detect the amplification product, a DNA sample, primers, and water must be added to the mixture.
- 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. In addition to DNA probes, the intercalating dye [dsGreen](#) can be used for fluorescence detection.
- Suitable for PCR fragments up to 3000 bp in length, with no more than 70% GC content, and not requiring 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 in the first PCR cycle inactivates the antibodies in the complex and activates the enzyme. The "Hot-Start" technology prevents non-specific amplification and primer dimer formation.
- The HS Taq DNA polymerase included has 5'-3' polymerase, 5'-3' exonuclease, and adenyltransferase activities, allowing the use of PCR products for TA cloning.
- Does not contain UDG and dUTP.

## Applications

Quantitative PCR (qPCR) using intercalating dyes such as dsGreen or hydrolyzable probes, standard PCR (with subsequent analysis by gel electrophoresis), PCR after prior cDNA synthesis, genotyping, colony PCR, product generation for TA cloning, etc.

# Equipment compatibility

Compatible with any thermocycler.

## PCR reaction mixture selection table

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

外观

溶解度

质量控制

储存: 4°C 下 12 个月 (自交付之日起)。

运输: 25°C 以下条件下 21 天。

复溶成液体后, 可在 4°C 下储存最多 30 天, 或在有效期内冷冻并储存在 -20°C 下。重构的混合物最多可经历五次冻融循环。

本产品仅供研究目的提供和销售。本产品并未经过食品、药品、医疗器械、化妆品等领域的安全性和效力测试, 且未经明示或暗示授权用于其他任何用途, 包括但不限于体外诊断、人类或动物用途, 以及商业用途。

声明

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